

IAP6 Rec'd PCT/PTO 03 MAR 2006

SEQUENCES

SEQ ID No:1 (Aph-1a)

MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVILVAGAFFWLVSLLLASVWVWIL
5 VHVTD RSDARLQYGLLIFGA AVSVLLQEVFRFA YYKLLKKADEGLASLS SEDGRSPI
SIRQMA YVVSGLSFGIISGVFSVINILADALGPGVVG IHGDS PYYFLTSAFLTAA IILLH
TFWGVV VFDACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGL
WAFITAGGSLRSIQRSLLCRRQEDSRVMVYSALRIPPED

10 SEQ ID No: 2 (JUP)

EVMNLMEQPIKVTEWQQTYTYDSGIHSGANTCVPSVSSKGIMEEDEACGRQYTLK
KTTTYTQGVPPSQGDLEYQMSTTARAKRVREAMCPGVS GEGQLALLATQVEGQA
TNLQRLAEP SQLLKS AIVHLINYQDDAELVTRALPELTKLLNDEDPVVVTKAAMIV
NQLSKKEASRRALMGSPQLVAAVVRTMQNTSDLD TARCTTSILHNL SHHREGLLA
15 IFKSGGIPALVRMLSSPVESVLFYAITTLHNL LLYQEGAKMACAGRRAQKMVPLL
NKNNPKFLAITTDCLQLLAYGNQESKLILANGGPQALVQIMRNYSYEKLLWTTSR
VLKVL SVCPSNKP AIVEAGGMQALGKHLTSNSPRLVQNCLWTLRNLSDVATKQE
GLESVLKILVNQLSVDDVNVLT CATGTLSNLTCNNSKNKTLVTQNSGVEALIHAIL
RAGDKDDITEPAVCALRHLSRHPEAEMAQNSVRLNYGIPAIVKLLNQPNQWPLV
20 KATIGLIRNLALCPANHAPLQEAAVIPRLVQLLVKAHQDAQRHVAAGTQQPYTDG
VRMEEIVEGCTGALHILARDPMNRMEIFRLNTIPLFVQLLYSSVENIQRVAAGVLC
ELAQDKEAADAIDAEGASAPLMELLHSRNEG TATYAAAVLFRISEDKNPDYRKR
SVELTNSL FKHDPA AWEAAQSMIPINEPYGDDMDATYRPMYSSDVPLDPLEMHM
DMDGDYPIDTYS DGLRPPYPTADHMLA

25

SEQ ID No: 3 (Psen1)

MTELPAPLSYFQNAQMSEDNHL SNTVRSQNDNRERQEHNDRRSLGHPEPLSNGRP
QGNSRQVVEQDEEED EELTKYGA KHVIMLFVPVTL CMVVV VVATIKSVSFYTRKD
GQLIYTPFTEDTETVGQRALHSILNAAIMISVTVVMTILLV VLYKYRCYKVIHAWLII
30 SSLLLLFFFSFIYLGEVFKTYNVAVDYITVALLIWNFGVVGMISIH WKGPLRLQQAY
LIMISALMALVFIKYLPEWTAWLILAVISVYDLVA VLCPKGPLRMLVETAQERNET
LFPALIYSSTMVWL VNMAEGDPEAQR RVSKNSKYNAESTERESQDTVAENDDGG

FSEEWEAQRDSHLGPHRSTPESRAAVQELSSSILAGEDPEERGVKLGLGDFIFYSVL
VGKASATASGDWNTTIACFVAILIGLCLTLLLLAIFKKALPALPISITFGLVIFYFATD
YLVQPFMDQLAFHQFYI

5 SEQ ID No: 4 (ACAT1)

MVGEEKMSLRNRLSKSRENPEEDEDQRNPAKESLETSPNGRIDIKQLIAKKIKLTAE
AEARLKPFPMKEVGSHFDDFVTNLIEKSASLDNGGCALTTFVLEGEKNNHRAKD
LRAPPEQGKIFIARRSLLDELLEVDHIRTYYHMFIALLLFILSTLVVDYIDEGRLVLE
FSLLSYAFGKFPTVVTWWIMFLSTFSVPYFLFQHWATGYSSSHPLIRSLFHGFL
10 FMIFQIGVLGFGPTYVVLA YTLPPASRFIIIFEQIRFVMKAHSFVRENVPRVLNSAKE
KSSTVPIPTVNQYLYFLFAPTLYRDSYPRNPTVRWGYVAMKFAQVFGCFYVYYI
FERLCAPLFRNIKQEPFSARVLVLCVFNSILPGVLILFLTFFAFLHCWLNAFAEMLRF
GDRMFYKDWWNSTSYSNYYRTWNVVVDWLYYYAYKDFLWFFSKRFKSAAM
LAVFAVSAVVHEYALAVCLSFFYPVLFLVLFMFFGMAFNFTVNDNRKKPIWNVLM
15 WTSFLGNGVLLCFYSQEWYARQHCPLKNPTFLDYVRPRSWTCRYVF

SEQ ID No: 5 (BRI)

MVKVTFNSALAQKEAKKDEPKSGEEALIIPDAVAVDCKDPDDVVPVGQRRWC
WCMCFGLAFMLAGVILGGAYLYKYFALQPDDVYYCGIKYIKDDVILNEPSADAPA
20 ALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFNKKLTA YLDLNLDKCYVI
PLNTSIVMPPRNLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHDK
ETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICS

SEQ ID No: 6 (calsyntenin 1)

MLRRPAPALAPAARLLL AGLLCGGGVWAARVNKHKPWLEPTYHGIVTENDNTVL
LDPPLIALDKDAPLRFAGEICGFKIHGQNVPFDAVVVDKSTGEGVIRSKEKLDCEL
QKDYSFTIQAYDCGKGPDGNTVKKSHKATVHIQVNDVNEYAPVFKEKSYKATVIE
GKQYDSILRVEAVDADCSPQFSQICSYEITPDVPFTVDKDG YIKNTEKLN YGKEHQ
YKLTVTAYDCGKKRATEDVLVKISIKPTCTPGWQGWNNRIEYEPGTGALAVFPNI
30 HLETCDEPVASVQATVELETSHIGKGC DRDTYSEKSLHRLCGAAAGTAELLPSPSG
SLNWTMGLPTDNGHDS DQVFEFNGTQAVRIPDG VVSVPKEPFTISVWMRHGPF
RKKETILCSSDKTDMNRHHYSLYVHGCRLIFLFRQDPSEEKKYRPAEFHWKLNQV

CDEEWHHYVLNVEFPSVTLYADGTSHEPFSVTEDYPLHPSKIETQLVVGACWQEF
SGVENDNETEPVTVACAGGDLHMTQFFRGNLAGLTLRSGKLADKKVIDCLYTCK
EGLDLQVLEDSGRGVQIQAHRSQVLTLLEGEDLGELDKAMQHISYLNRSRQFPTPGI
RRLKITSTIKCFNEATCISVPPVDGYVMVLQPEEPKISLSGVHHFARAASEFESSEGV
5 FLFPELRIISTITREVEPEGDGAEDPTVQESLVSEEIVHDLDTC EVTVEGEELNHEQE
SLEVDMARLQQKGIEVSSSELGMTFTGVDTMASYEEVLHLLRYRNWHARSLDR
KFKLICSELNGR YISNEFKVEVNVHTANPMEHANHMAAQPQFVHPEHRSFVDLS
GHNLANPHPFVAVHSTATVIVVVCVSSLVFMILGVFRIRAAHRRRTMRDQDTGKE
NEMDWDDSAITITVNPMETYEDQHSSEEEEEEEEEEESEDGEEEDDITSAESESSEE
10 EEQEQQDPQNA TRQQQLEWDDSTLSY

SEQ ID No: 7 (DLK1)

MTATEALLRVLLLLLAFGHSTYGAECFPACNPQNGFCEDDNVCRCQPGWQGPLIC
DQCVTSPGCLHGLCGEPGQCICTDGWDGELCDRDVRACSSAPCANNGTCVSLDG
15 GLYECSCAPGYSGKDCQKKDGPCVINGSPCQHGGTCVDDEGRASHASCLCPPGFS
GNFCEIVANSCTPNPCENDGVCTDIGGDFRCRCPAGFIDKTCSRPTVNCASSPCQN
GGTCLQHTQGQAICFTILGVLTSVLVLTGVIVFLNKCETWVSNLRYNHMLRKKK
NLLLQYNSGEDLA VNIIFPEKIDMTTFSKEAGDEEI

20 SEQ ID No: 8 (DSCD75)

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRV
LPSDLDLLLHMNNARYLREADFARVAHLTRCGVLGALRELRAHTVLAASCARHR
RSLRLLEPFVTRLLGWDDRAFYLEARFVSLRDGFVCALLRFRQHLLGTSPERVV
QHLCQRRVEPEL PADLQHWISYNEASSQLLRMESGLSDVTKDQ

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SEQ ID No:9 (Nicastrin)

MATAGGGSGADPGSRGLLRLLSFCVLLAGLCRGNSVERKIYIPLNKTAPCVRLINA
THQIGCQSSISGDTGVIHVVEKEEDLQWVLTGPNPPYMVLLSKHFTRLMEKL
KGRTSRIAGLA VSLTKPSPASGFSPSVQCPNDGFGVYSNSYGPEFAHCREIQWNSL
30 GNGLAYEDFSFPIFLEDENETKVIKQCYQDHNLSQNGSAPTFLCAMQLFSHMHA
VISTATCMRRSSIQTFSINPEIVCDPLSDYNVWSMLKPINTTGTLKPDDR VVVAAT
RLDSRSFFWNVAPGAESA VASFVTQLAAAEALQKAPDVTTLPRNVMFVFFQGETF

DYIGSSRMVYDMEKGKFPVQLENVDSFVELGQVALRTSLELWMHTDPVSQKNES
VRNQVEDLLATLEKSGAGVPAVILRRPNQSQPLPPSSLQRFLRARNISGVVLADHS
GAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNFVTD TAKALADVATVLGRALYE
LAGGTNFSDTVQADPQTVTRLLYGFLIKANNSWFQSILRQDLRSYLG DGPLQHYIA
5 VSSPTNTTYVVQYALANLTGTVVNL TREQCQDPSKVPSENKDLYEYSWVQGPLHS
NETDRLPRCVRSTARLARALSPAFELSQWSSTEYSTWTESRWKDIRARIFLIASKEL
ELITLTVGFGILIFSLIVTYCINAKADVLFIAPREPGAVSY

SEQ ID No:10 (Pen-2)

10 MNLERVSNEEKLNLCKRYYLGGFAFLPFLWLVNIFWFFREAF LVPAYTEQSQIKG
YVWRS AVGFLFWVIVLT SWITIFQIYRPRWGALGDYLSFTIPLGTP

SEQ ID No: 11 (FACL3)

MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSES RQEKS NR IAKP
15 VNSKPDSAYRSVNSLDGLASVLYPGCDTLDKVFTYAKNKFKNKRL LGTREV LNEE
DEVQPNGKIFKKVILGQYNWLSYEDVFVRAFNFNGNLQMLGQKPKTNIAIFCETR
AEWMIAAQACFMYNFQLVTLYATLGGAIVHALNETEVTNITSKELLQTKLKDIV
SLVPRLRHIITVDGKPPTWSDFPKGIVHTMAAVEALGAKASMENQPHSKPLPSDIA
VIMYTSGSTGLPKGVMISHSNIAGITGMAERIPELGEEDVYIGYLPLAHVLELSAEL
20 VCLSHGCRIGYSSPQTLADQSSKIKKGSKGDT SMLKPTLMAAVPEIMDRIYKNVM
NKVSEMSSFQRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLLGGNIRLLLCG
GAPLSATTQRFMNICFCCPVGQGYGLTESAGAGTISEVWDYNTGRV GAPLVCCEI
KLKNWEEGGYFN TDKPHPRGEILIGGQSVTMGYKNEAKTKADFSE DENGQRWL
CTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLVDNICA YANS
25 YHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAISASL
EKFEIPVKIRLSPEPWT PETGLVTDAFKLKRKELKTHYQADIERMYGRK

SEQ ID No: 12 (FLJ10579)

MSRLGALGGARAGLGLLLGTAAGLGFLCLLYSQRWKRTQRHGRS QSLPNSLDYT
30 QTSDPGRHVMLLRAVPGGAGDASVLPSPREGQEKVLDRLDFVLTSLVALRREVE
ELRSSLRGLAGEIVGEVRCHMEENQRVARRRRFPFVRERSDSTGSSSVYFTASSGA
TFTDAESEGGYTTANAESDNERDSDKESEDGEDEVSCETVKMGRKDSL DLEEEAA

SGASSALEAGGSSGLEDVLP LLQQADELHRGDEQGKREGFQ LLLNNKL VYGSRQD
FLWRLARAYSDMCELTEEVSEKKSYALDGKEEAEEAALEKGDSEADCHLWYAVLC
GQLAEHESIQRRIQSGFSFKEHVDKAIALQPENPMAHFLLGRWCYQVSHLSWLEK
KTATALLESPLSATVEDALQSFLKAEELQPGFSKAGR VYISKCYRELGKNSEARW
5 WMKLALLELPDVTKEDLAIQKDLEEELEVILRD

SEQ ID No: 13 (ITM2C)

MVKISFQPAVAGIKGDKADKASASAPAPASATEILLTPAREEQPPQHRSKRGGSVG
GVCYLSMGMVVLLMGLVFASVYTYRYFFLAQLARDNFFRCGVLYEDSLSSQVRT
10 QMELEEDVKIYLDENYERINVPVPQFGGGDPADIIHDFQRGLTAYHDISLDKCYVIE
LNTTIVLPPRNFWE LLMNVKRGTYLPQTYIIQEEMVVTEHVSDKEALGSFTYHLCN
GKDTYRLRRRATR RRINKRGAKNCNAIRHFENTFVVETLICGVV

SEQ ID No:14 (Presenilin)

15 MTELPAPLSYFQNAQMSEDNHLSNTNDNRERQEHNDRRSLGHPEPLSNGRPQGNS
RQVVEQDEEEDEELTKYGAKHVIMLFVPVTLCMVVVVATIKSVSFYTRKDGQLI
YTPFTEDTETVGQRALHSILNAAIMISVIVVMTILLVVLKYRCYKVIHAWLISSLL
LLFFFSFIYLGVEVFKTYNVAVDYITVALLIWNLGVVGMISHWKGPLRLQQA YLIMI
SALMALVFIKYLPEWTAWLILAVISVYDLVAVLCPKGPLRMLVETAQERNETLFP
20 ALIYSSTMVWLVNMAEGDPEAQRRVSKNSKYNAESTERESQDTVAENDDGGFSE
EWEAQRD SHLGPHRSTPESRAAVQELSSSILAGEDPEERG VKLGLGDFIFYSVLVG
KASATASGDWNTTIACFVAILIGLCLTLLLLAIFKKALPALPISITFGLVFYFATDYL
VQPFMDQLAFHQFYI

25 SEQ ID No:15 (Sortilin/Sort1)

MERPWGAADGLSRWPHGLGLLLLLQLLPPSTLSQDRLDAPPPPAAPLPRWSGPIGV
SWGLRAAAAGGAFPRGGRWRRSAPGEDEECGRVRDFVAKLANNTHQHVFDDL R
GSVSLSWVG DSTGVILVLTTFHVPLVIMTFGQSKLYRSEDY GKNFKDITDLINNTFI
RTEFGMAIGPENSGKVVLTAEVSGGSRGGRIFRSSDFAKNFVQTDLPFHPLTQMM
30 YSPQNSDYLLALSTENGLWVSKNFGGKWEEIHKAVCLAKWGS DNTIFFTTYANGS
CKADLGALELWRTSDLGKSFKTIGVKIYSFGLGGRFLFASVMADKDTTRRIHVSTD
QGDTWSMAQLPSVGQE QFYSSILAANDDMVFMHVDEPGDTGFGTIFTSDDRGIVYS

KSLDRHLYTTTGGETDFTNVTSLRGVYITTSVLSEDNSIQTMITFDQGGRWTHLRKP
ENSECDATAKNKNECSLHHASYSISQKLNVPMAPLSEPNAVGVIAHGSVGDAISV
MVPDVYISDDGGYSWTKMLEGPHYTYTILDSGGIIVAIEHSSRPINVIKFSTDEGQCW
QTYTFTTRDPIYFTGLASEPGARSMNISIWGFTESFLTSQWVSYTIDFKDILERNCEEK
5 DYTIWLAHSTDPEDYEDGCILGYKEQFLRLRKSSMCQNGRDYVVTKQPSICLCSLE
DFLCDFGYRPENDSKCVEQPELKGHDLFCLYGREEHLTTNGYRKIPGDKCQGG
VNPVREVKDLKKKCTSNFLSPEKQNSKSNVPIILAIVGLMLVTVVAGVLIVKKYV
CGGRFLVHRYSVLQQHAEANGVDGVDALDTASHTNKSgyHDDSDLE

10 SEQ ID No: 16 (ITPR1)

MSDKMSSFLHIGDICSLYAEGSTNGFISTLGLVDDRCVVQPETGDLNNPPKKFRDC
LFKLCPMNRYS AQKQFWKAAKPGANSTTDAVLLNKLHHAADLEKKQNETENRK
LLGTVIQYGNVIQLLHLKSNKYLTVNKRLPALLEKNAMRVTLDEAGNEGSWFIQ
PFYKLRSIGDSVIGDKVVLNPNVAGQPLHASSHQLVDNPGCNEVNSVNCNTSWK
15 IVLFMKWSDNKDDILKGGDVVRLFHAEQEKFLTCDEHRKKQHVFRLTTGRQSATS
ATSSKALWEVEVVQHDPCRGGAGYWNSLFRFKHLATGHYLA AEVDPDFEEECLE
FQPSVDPDQDASRSRLRNAQEKMVYSLVS VPEGNDISSIFELDPTTLRGGDSL VPR
NSYVRLRHLCTNTWVHSTNIPIDKEEEKPVMLKIGTSPVKEDKEAFAIVPVSPA EV
RDLD FANDASKVLGSIAGKLEKGTITQNERRSVTKLLEDLVYFVTGGTNSGQDVL
20 EVVFSKPNRERQKLMREQNILKQIFKLLQAPFTDCGDGPMLRLEELGDQRHAPFR
HICRLCYRVL RHSQQDYRKNQEYIAKQFGFMQKQIGYDVLAEDTITALLHNNRKL
LEKHITAAEIDTFVSLVRKNREPRFLDYLS DLCVSMNKSIPVTQELICKAVLNPTNA
DILIETKLVLSRFEFEGVSSTGENALEAGEDEEEVWLFWRDSNKEIRSKSVRELAQD
AKEGQKEDRDVLSYRYQLNLFARMCLDRQYLAIN EISGQLDVDLILRCMSDENL
25 PYDLRASFCRLMLHMHVDRDPQEQTVPVKYARLWSEIPSEIAIDDYDSSGASKDEI
KERFAQTMEFVEEYLRDVVCQRFPFSDKEKNKLTFEVVNLARNLIYFGFYNFSDLL
RLTKILLAILDCVHVTTIFPISKMAKGEENKGNNDVEK LKSSNVMRSIHGVGELMT
QVVLRGGGFLPMTPMAA APEGNVKQAEPEKEDIMVMDTKLKIEILQFILNVRLDY
RISCLLCIFKREFDESNSQTSETSSGNSSQEGPSNVP GALDFEHIEEQAEGIFGGRKV
30 YFHEENTPLDLDHGGRTFLRVLLH LTMHDY PPLVSGALQLLFRHFSQRQEVLQA
FKQVQLLVTSQDVDNYKQIKQDLDQLRSIVEKSELWVYKGQGPDETMDGASGEN
EHKKTEEGNNKPKQKHESTSSYNYRVVKEILIRLSKLCVQESASVRKSRKQQQRLLR

NMGAHAVVLELLQIPYEKAEDTKMQEIMRLAHEFLQNFCAGNQQNQALLHKHIN
LFLNPGILEAVTMQHIFMNNFQLCSEINERVVQHFVHCIETHGRNVQYIKFLQTIVK
AEGKFIKKCQDMVMAELVNSGEDVLVIFYNDRASQTLIQMMRSEDRMDENSPL
MYHIHLVELLAVCTEGKNVYTEIKCNSLLPLDDIVRVVTHEDCIPEVKIAYINFLNH
5 CYVDTEVEMKEIYTSNHMWKLFENFLVDICRACNNTSDRKHADSSILEKYVTEIVM
SIVTTFFSSPFSQSTTLQTRQPVFVQLLQGVFRVYHCNWLMPQSQKASVESCIRVLS
DVAKSRAIAIPVDLDSQVNNLFLKSHSIVQKTAMNWRLSARNAARRDSVLAASRD
YRNIIERLQDIVSALEDRLRPLVQAELSVLVDVLHRPELLFPENTDARRKCESGGFI
CKLIKHTKQLLEENEEKLCIKVLQTLREMMTKDRGYGEKLISIDELDNAELPPAPD
10 SENATEELEPSPLRQLEDHKRGEALRQVLVNRYYGNVRPSGRRESLTSFGNGPLS
AGGPGKPGGGGGGGSGSSMSRGEMSLAEVQCHLDKEGASNLVIDLIMNASSDRVF
HESILLAIALLEGGNTTIQHSFFCRLTEDKKSEKFFKVIFYDRMKVAQQEIKATVTVN
TSDLGNKKKDDEVDRDAPSRKKAKEPTTQITEEVRDQLEASAATRKAFTTFRRE
ADPDDHYQPGEQTQATADKAKDDLEMSAVITIMQPILRFLQLLCENHNRLDLQNFL
15 RCQNNKTNYNLVCETLQFLDCICGSTTGGLGLLYINEKNVALINQTLLESLTEYC
QGPCHENQNCIATHESNGIDIITALILNDINPLGKKRMDLVLELKAKNASKLLLAIM
ESRHDSENAERILYNMRPKELVEVIKAYMQGEVEFEDGENGEDGAASPRNVGH
NIYILAHQLARHNKELQSMKPGGQVDGDEALEFYAKHTAQIEIVRLDRTMEQIVF
PVPSICEFLTKEKSLRIYYTTERDEQGSKINDFFLRSEDLFNEMNWQKKLRAQPVL
20 YWCARNMSFWSSISFNLAFLMNLLVAFFYPFKGVRGGTLEPHWSGLLWTAMLIS
LAIVIALPKPHGIRALIASTILRLIFS VGLQPTLFLLGAFNVCNKIIFLMSFVGNCGTFT
RGYRAMVLDVEFLYHLLYLVICAMGLFVHEFFYSLLLFDLVYREETLLNVIKSVTR
NGRSIILTAVLALILVYLF SIVGYLFFKDDFILEVDRLPNETAVPETGESLASEFLFSD
VCRVESGENCSPAPREELVPAEETEQDKEHTCETLLMCIVTVLSHGLRSGGGVGD
25 VLRKPSKEEPLFAARVIYDLLFFFMVIII VLNLI FGVIIDTFADLRSEKQKKEEILKTT
CFICGLERDKFDNKT VTFEEHIKEEHNMWHYLCFIVLVKVKDSTEYTGPE SYVAE
MIKERNLDWFPRMRAMSLVSSDSEGEQNELRNLQEKLESTMKLVTNLSGQLSELK
DQMTEQRKQKQRIGLLGHPPHMNVNPQQA
30 SEQ ID No: 17 (KiDins220)
LQLSVKMSVLISQSVINYVEEENIPALKALLEKCKDVDERNECGQTPLMIAAEQGN
LEIVKELIKNGANCNLEDLDNWTALISASKEGHVHIVEELLKCGVNLEHRDMGGW

TALMWACYKGRTDVVELLSSHGANPSVTGLYSVYPIIWAAGRGHADIVHLLLQN
GAKVNCSDKYGTTPLVWAARKGHLECVKHELLAMGADVDQEGANSMTALIVAV
KGGYTQSVKEILKRNPVNLTDKDGNTALMIASKEGHTTEIVQDLLDAGTYVNIPD
RSGDTVLI GAVRGGHVEIVRALLQKYADIDIRGQDNKTALYWAVEKGNATMVRD
5 ILQCNPDTEICTKDGETPLIKATKMRNIEVVELLLDKGAKVSAVDKKGDTPLHIAIR
GRSRKLAELLLRNPKDGRLLYRPNKAGETPYNIDCSHQKSILTQIFGARHLSPTETD
GDMLGYDLYSSALADILSEPTMQPPICVGLYAQWGS GKSFLKKLEDEMKTFAQG
QIEPLFQFSWLIVFLTLLLCGGLGLLFAFTVHPNLGIAVSLSFLALLYIFFIVTYFGGR
REGESWNWAWVLSTRLARHIGYLELLKLMMFVNPPPELPEQTTKALPVRFLFTDYN
10 RLSSVGGETSLAEMIATLSDACEREFGLATRLFRVFKTEDTQGKKKWKKTCCPLS
FVIFLFIIGCIISGITLLAIFRVDPKHLTVNAVLSIASVVGLAFVLNCRWWQVLDL
LNSQRKRLHNAASKLHKLKSEGFMKVLKCEVELMARMAKTIDSFTQNQTRLVVII
DGLDACEQDKVLQMLDTVRVLFSGKPFIAIFASDPHIIKAINQNLNSVLRDSNING
HDYMRNIVHLPVFLNSRGLSNARKFLVTSATNGDVPCSDTTGIQEDADRRVSQNS
15 LGEMTKLGSKTALNRRD TYRRRQMQRITRQMSFDLTKLLVTEDWFS DISPQTMR
RLNIVSVTGRLLRANQISFNWDRLASWINLTEQWPYRTSWLILYLEETEGIPDQM
TLKTIYERISKNIPTTKDVEPLLEIDGDIRNFEVFLSSRTPVLVARDVKVFLPCTVNL
DPKLREIADVRAAREQISIGGLAYPPLPLHEGPPRAPSGYSQPPSVCSSTS FN GPFA
GGVVSPQPHSSYYSGMTGPQHFPFYNRPFFAPYLYTPRYYPGGSQHLSRPSVKTSL
20 PRDQNNGLEVIKEDAAEGLSSPTDSSRGSGPAPGPVLLNSLNVDAVCEKLKQIEG
LDQSMPLPQYCTTIKKANINGR VLAQCNI DELKKEMNMNFGDWHLFRSTVLEMRN
AESHVVPEDPRFLSESSSGPAPHGEPARRASHNELPHTELSSQTPYTLNFSFEELNTL
GLDEGAPRHSNLSWQSQTRRTPSLSSLNSQDSSIEISKLTDKVQAEYRDAYREYIA
QMSQLEGGPGSTTISGRSSPHSTYYMGQSSSGGSIHSNLEQEKGDSEPKPDDGRK
25 SFLMKRGDVIDYSSSGVSTNDASPLDPITEEDEKSDQSGSKLLPGKKSSERSSLFQT
DLKLKGSGLRYQKLPSDEDESGTEESDNTPLLKDDKDRKAEGKVERVPKSPEHSA
EPIRTFIKAKEYLSDALLDKKDSSDSGVRSSSESPNHS LHNEVADDSQLEKANLIEL
EDDSHSGKRGIPHSLSGLQDPILARMSICSEDKKSPSECSLIASSPEENWPACQKAYN
LNRTPTSTVTLNNSAPANRANQNFDMEGIRETSQVILRPSSSPNPTTIQENENLKSM
30 THKRSQRSSYTRLSKDPPELHAAASSESTGFGEERESIL

MDLEGDRNGGAKKKNFFKLNNKSEKDKKEKKPTVSVFSMFRYSNWLDKLYMVV
GTLAAIIHGAGLPLMMLVFGEMTDIFANAGNLEDLMSNTNRSNDINDTGFFMNL
DMTRYAYYYSGIGAGVLVAAIYQVSFWCLAAGRQIHKIRKQOFFHAIMRQEIGWFD
VHDVGELNTRLTDDVSKINEGIGDKIGMFFQSMATFFTGFIVGFTRGWKLT
5 SPVLGLSAAVWAKILSSFTDKELLAYAKAGAVAEVLAAIRTVIAFGGQKKELER
YNKNLEEAKRIGIKKAITANISIGAAFLLIYASYALAFWYGTTLVLSGEYSIGQVLT
VFFSVLIGAFSVGQASPSIEAFANARGAAYEIFKIIDNKPSIDSYKSGHKPDNIKGN
LEFRNVHFSYPSRKEVKILKGLNLKVQSGQTVALVGNSGCGKSTTVQLMQRLYDP
TEGMVSVDGQDIRTINVRFLREIIGVVSQEPVLFATTIAENIRYGRENVMTMDEIEKA
10 VKEANAYDFIMKLPKFDTLVGERGAQLSGGQKQRIAIARALVRNPKILLLDEATS
ALDTESEAVVQVALDKARKGRTTIVIAHRLSTVRNADVIAGFDDGVIVEKGNHDE
LMKEKGIYFKLVMTQTAGNEVELENAADESKSEIDALEMSSNDSRSSLIRKRSTR
SVRGSQAQDRKLSTKEALDESIPPVSFWRIMKLNLTWPYFVVGVFCAIINGGLQP
AFAIIFSIIIGVFTRIDDPETKRQNSNLSLLFLALGIISFITFFLQGFTEGKAGEILTKR
15 LRYMVFRSMLRQDVSWFDDPKNTTGALTTRLANDAAQVKGAGSRLAVITQNI
NLGTGIIISFIYGWQLTLLLLAIVPIIAIAGVVEMKMLSGQALKDKKELEGAGKIA
AIENFRTVVSLTQEQKFEHMYAQSLQVPYRNSLRKAHIFGITFSFTQAMMYFSYAG
CFRFGAYLV AHKLMSFEDVLLVFSAVVFGAMAVGVVSSFAPDYAKAKISAAHIIM
IIEKTPLIDSYSTEGLMPNTLEGNTFGEVVFNYPTRPDIPVLQGLSLEVKKGQTLA
20 LVGSSGCGKSTVVQLLERFYDPLAGKVLLDGKEIKRLNVQWLRAGHLGIVSQEPILF
DCSIAENIAYGDNRSRVVSQEEIVRAAKEANIHAFIGIESLPNKYSTKVGDKGTQLSGG
QKQRIAIARALVRQPHILLLDEATSALDTESEKVVQEALDKAREGRTCIVIAHRLST
IQNADLIVVFQNGRVKEHGHQQLLAQKGIYFSMVSQAGTKRQ

25 SEQ ID No: 19 (Neurotrypsin)

MTLARFVLALMLGALPEVVGFDVLNDSLHHSHRHSPAGPHYPPYYLPTQQRPPR
TRPPPPLPRFPRPPRALPAQRPHALQAGHTPRPHPWGPCPAGEPWVSVTDFGAPCLR
WAEVPPFLERSPPASWAQLRGQRHNFCSRSPDGAGRPWCFYGDARGKVDWGYCD
CRHGSVRLRGGKNEFEGTVEVYASGVWGTVCSSHWDDSDASVICHQLQLGGKGI
30 AKQTPFSGGLIPIYWSNVRRCRGDEENILLCEKDIWQGGVCPQKMAAAVTCSFSH
GPTFPPIRLAGGSSVHEGRVELYHAGQWGTVCDDQWDDADAEVICRQLGLSGIAK
AWHQAYFGEGSGPVMLDEVRCCTGNELSIQCCKSSWGEHNCGHKEDAGVSCSTPL

TDGVIRLAGGKGSHEGRLEVYYRGQWGTVCDDGWTELNTYVVCRQLGFKYGKQ
ASANHFEESTGPIWLDDVSCSGKETRFLQCSRRQWGRHDCSHREDVSIACYPGGE
GHRLSLGFPVRLMDGENKKEGRVEVFINGQWGTICDDGWTDKDAAVICRQLGYK
GPARARTMAYFGEGKGPIHVDNVKCTGNERSLADCIKQDIGRHNCRHSEDAGVIC
5 DYFGKKASGNSNKESSLSSVCGLRLLHRRQKRIIGGKNSLRGGWPWQVSLRLKSSH
GDGRLLCGATLLSSCWVLTAAHCFKRYGNSTRSYAVRVGDYHTLVPEEFEEEEIGV
QQIVIHREYRPDRSDYDIALVRLQGPEEQCARFSSHVLPACLPLWRERPQKTASNC
YTTGWGDTGRAYSRTLQQAAPLLPKRFCEERYKGRFTGRMLCAGNLHEHKRVDS
CQGDSSGGLMCERPGESWVVYGVTSWGYGCGVKDSPGVYTKVSAFVPWIKSVT
10 KL

SEQ ID No: 20 (PLD3)

LAVVGFGALMTQLFLWEYGDLHLFGPNQRPAPCYDPCEAVLVESIPEGLDFPNAS
TGNPSTSQAWLGLLAGAHSSLDIASFYWTLTNNDTHTQEPSAQQGEEVLRQLQTL
15 APKGVNVRIAVSKPSGPQPQADLQALLQSGAQVRMVDMQKLTHGVLHTKFWV
DQTHFYLG SANMDWRS LTQVKELGVVMYNC SCLARDLT KIFEAYWFLGQAGSSI
PSTWPRFYDTRYNQETPMEICLNGTPALAYLASAPPPLCPSGRTPDLKALLNVVDN
ARSFIYVAVMNYLPTLEFSHPHRFWPAIDDGLRRATYERGVKVRLLISCWGHSEPS
MRAFLLSLAALRDNHTHSDIQVKLFVVPADAEAQARIPYARVNHNKYMVTERATYI
20 GTSNWSGNYFTETAGTSLLVTONGRGGLRSQLEAIFLRDWDSPYSHDLDT SADS
V
GNACRLL

SEQ ID No: 21 (RetSDR2)

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKL
25 KSKLVLDINKHGLEETAACKCKGLGAKVHTFVVDCSNREDIYSSAKKVKA EIGD
VSILVNNAGVVYTSDFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIV
TVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNT
GFIKNPSTSLGPTLEPEEVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLK
RKISVKFDAVIGYKMK AQ

30
SEQ ID No:22 (APLP2)

MAATGTAAAAATGRLLLLLLVGLTAPALALAGYIEALAAANAGTGFAVAEPQIAM
FCGKLNMHVNIQTGKWEPTGTGKSCFETKEEVQLQYCQEMYPELQITNVMEANQ
RVSIDNWCRRDKKQCKSRFVTPFKCLVGEFVSDVLLVPEKCCQFFHKERMEVCENH
QHWHTVVKEACLTQGMTLYSYGMLLPCGVDQFHGTEYVCCPQTKIIGSVSKEEEE
5 EDEEEEEEEDEEEDYDVYKSEFPTEADLEDFTAAVDEDEDEDEEEGEEVVEDRDY
YYDTFKGDDYNEENPTEPGSDGTMSDKEITHDVKA VCSQEAMTGPCRAVMPRW
YFDLSKGKCVRFYGGCGGNRNNFESEDYCMAVCKAMIPPTPLPTNDVDVYFETS
ADDNEHARFQKAKEQLEIRHRNRMDRVKKEWEEAELQAKNLPKAERQTLIQHFQ
AMVKALEKEAASEKQQLVETHLARVEAMLNDRRRMALENYLAALQSDPPRPHRI
10 LQALRRYVRAENKDRHLHTIRHYQHVLAVDPEKAAQMKSQVMTHLHVIEERRNQS
LSLLYKVPYVAQEIQEIDELLQEQRADMDQFTASISETPVDVRVSSESESEIPPFHP
FHPFPALPENEDTQPELYHPMKKGSVGEQDGGGLIGAEKVINSKNKVDENMVID
ETLDVKEMIFNAERVGGLEEERESVGPLREDFSLSSSALIGLLVIAVAIATVIVISLV
MLRKRQYGTISHGIVEVDPMLTPEERHLNKMQNHGYENPTYKYLEQMQUI

15

SEQ ID No:23 (APP)

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWD
SDPSGKTCTCIDTKEGILQYCQEVYPELQITNVVEANQPVTIQNWCKRGRKQCKTHP
HFVIPYRCLVGEFVSDALLVPDKCKFLHQERMDVCETHLHWHTVAKETCSEKSTN
20 LHDYGMMLPCGIDKFRGVFVCCPLAEESDNVDSADAEEDDSDVWWGGADTDY
ADGSEDKVVEVAEEEEVAEVEEEEADDEDEDEDGDEVEEEEAEPEYEEATERTTSI
ATTTTTTTESVEEVVREVCSEQAETGPCRAMISRWFYFDVTEGKCAPFFYGGCGGN
RNNFDTEEYCMAVCGSAMSQSLLKTTQEPLARDPVKLPTTAASTPDAVDKYLETP
GDENEHAHFQKAKERLEAKHRERMSQVMREWEEAERQAKNLPKADKKA VIQHF
25 QEKVESLEQEAANERQQLVETHMARVEAMLNDRRRLALENYITALQAVPPRPRH
VFNMLKKYVRAEQKDRQHTLKHFEHVRMVDPKKAAQIRSQVMTHLRVIYERMN
QSLSLLYNVPAAVEEIQDEVDELLQKEQNYSDDVLANMISEPRISYGNDALMPSLT
ETKTTVELLPVNGEFLDDLQPWHSFGADSVANTENEVEPVDARPAADRGLTTR
PGSGLTNIKTEEISEVKMDAEFRHDSGYEVHHQKL VFFAEDVGSNKGAIIGLMVGG
30 VVIATVIVITLVMLKKKQYTSIHGVEVDAAVTPEERHLSKMQQNGYENPTYKF
FEQMQRN

SEQ ID No: 24 (SXN1)

MSGELPPNINIKEPRWDQSTFIGRANHFFTVTDPRNILLTNEQLESARKIVHDYRQG
IVPPGLTENELWRAKYTYDSAFHPDTGEKMILIGRMSAQVPMNMTTTGCMMTFYR
TTPAVLFWQWINQSFNAV VNYTNRS GDAPLTVNELGTAYVSATTGAVATALGLN
5 ALTKHVSPLIGRFVPFAA VAAANCINPLMRQRELKVGIPVTDENG NRLGESANAA
KQAITQVVVSRILMAAPGMAIPPFIMNTLEKKAFLKRFPWMSAPIQVGLVGFCLVF
ATPLCCALFPQKSSMSVTSLEAELQAKIQESHPELRRVYFNKGL

SEQ ID No: 25 (SORL1)

10 MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGD
RELRLWARGDARGASRADEKPLRRKRSAALQPEPIKVYGQVSLNDSHNQMVVH
WAGEKSNVIVALARDSLALARP KSSDVYVS YDYGKSFKKISDKLNFGLGNRSEAV
IAQFYHSPADNKRYIFADAYA QYLWITFDFCNTLQGFSIPFRAADLLLHASKASNLLL
GFDRSHPNKQLWKSDDFGQTWIMI QEHVKSFSW GIDPYDKPNTIYIERHEPSGYST
15 VFRSTDFFQSRENQEVILEEVRDFQLRDKYMFATKV VHLLGSEQQSSVQLWVSFG
RKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNRRTNLYISEAEGLKFSLSLE
NVLYYSPGGAGS DTLVRYFANE PFADFH RVEGLQGVYIATLINGS MNEENMRSVI
TFDKGGTWEFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLNLQLRRMPILSKE
SAPGLIATGSVGKNLASKTNVYISSAGARWREALPGPHYTTWGDHGGITTAIAQ
20 GMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIFGSNKENVHSW
LILQVNATDALGV PCTENDYKLWSPS DERGNECLLGHKTVFKRRTPHATCFNGED
FDRPVVVSNC SCTREDYECDFGFKMSEDL SLEVCVPDPEFSGKSYSPVP CPVGST
YRRTRGYRKISGDTCSGGDVEARLEGE LVPCPLAEENE FILYAVR KSIYRYDLASG
ATEQLPLTGLRAA VALDFDYEHNCLY WSDLALDVIQRLCLNGSTGQEVINSLET
25 VEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGV
MFWTDWGD LKPGIYRSNM DGSAAYHLVSEDVKWPNGISVDDQWIYWTDAYLEC
IERITFSGQQRSVILDNLPHYAIA VFKN EIWDDWSQLSIFRASKYSGSQMEILAN
QLTGLMDMKIFYKGKNTGSNACVPRPCSL LCLPKANN SRSCRCPEDVSSSVLPSG
DLMCD CPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDND CGDMS
30 DERNCP TTICDLDTQFRCQESGTCIPLSYKCDLEDDCGD NSDESHCEMHQCRSDEY
NCSSGMCIRSSWVCDGDND CRDWSDEANCTAIYHTCEASN FQCRNGHCIPQRWA
CDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCE

PLCTHFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDE
FGFQCQNGVCISLIWKCDGMDDCGDYSDEANCENPTEAPNCSR YFQFRCENGHCI
PNRWKCDREND CGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDTW
VCDGYRDCADGSDEEACPLL ANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRC
5 DGHQDCQDGRDEANCPTHSTLT CMSREFQCEDGEACIVLSERCDGFLDCSDESDE
KACSDELTVYKVQNLQWTADFSGDVTLTWMRPKKMPSASC VYNVYYRVVGESI
WKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDA
PRNLQLSLPREAEGVIVGHWAPPIH THGLIREYIVEYSRSGSKMWASQRAASNFEI
KNLLVNTLYTVRVA AVTSRGIGNWSDSKSITTKGKVIPPPDIHIDSYGENYLSFTLT
10 MESDIKVNGYVVNLFWAFDTHKQERRTLNFRGSILSHKVGNLTAHTSYEISAWAK
TDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTA VECTWTGPRNVVYGIFYATSF
LDLYRNPKSLTTS LHNKT VIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLP
PRHLHVHTGKTSVVIK WESPYDSPDQDLLY AIAVKDLIRKTDRSYKVKS RNSTV
EYTLNKL EPGGKYHIIVQLGNMSKDSSIKITTVSLSAPDALKIITENDHVLLFWKSL
15 ALKEKHFNESRGYEIHMFD SAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARC
LFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAIL
YTKHRR LQSSFTAFANSHYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

SEQ ID No: 26 (SPC18)

20 MSLDFLDDVRRMNRQLYYQVLNFGMIVSSALMIWKGLM VITGSESPIVVVL SG
SMEPAFHRGDLLFLTNRVEDPIRVGEIVVFRIEGREIPVHRVLKIHEKQNGHIKFLT
KGDNNAVDDRGLYKQGQHWLEKKDVVGRARGFVPYIGIVTILMNDYPKFKYAV
LFLGLFVLVHRE

25 SEQ ID No: 27 (SPC22)

MNTVLSRANS LFAFSLSVMAALTFGCFITTA FKDRSVPVRLHVSRI MLKNVEDFTG
PRERSDLGFITSDITADLENIFDWNVKQLFLYLSAEYSTKNNALNQVVLWDKIVLR
GDNPKLLLKDMKTKYFFFDDGNGLKGNRNVTLT LSWNVVPNAGILPLVTGSGHV
SVPFPDTYEITKSY

30

SEQ ID No: 28 (SPC25)

MAAAAVQGGRSGGSGGCSGAGGASNCGTGSGRSGLLDKWKIDDKPVKIDKWDG
SAVKNSLDDSAKKVLLEKYKYVENFGLIDGRLTICTISCFFAIVALIWDYMHPFPES
KPVLAALCVISYPLFMLSFMGILTYTSYKEKSIFLVAHRKDPTGMDPDDIWQLS
SSLRFDKDYTLKLTIFISGRTKQQREAEFTKSIKFFDHSGTLVMDAYEPEISRLHD
5 SLAIERKIK

SEQ ID No: 29 (stearoyl-CoA desaturase)

MPAHLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDP
TYKDKEGPPSPKVEYVWRNIIIMSLHLGALYGITLIPTCKFYTWLWGVFYFVSAL
10 GITAGAHRLWSHRSYKARLPLRLFLIANTMAFQNDVYEWARHDHRAHHKFSETHA
DPHNSRRGFFFSHVGVLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGL
LMMCFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPY
DKNISPRENILVSLGAVGEGFHNYHHSFPYDYSASEYRWHINFTTFFIDCMAALGL
AYDRKKVSKAAILARIKRTGDGNYKSG

15

SEQ ID No: 30 (TMP21)

MSGLSGPPARRGPFPLALLLLFLLGPRLVLAISFHLPIINSRKCLREEIHKDLLVTGAY
EISDQSGGAGGLRSHLKITDSAGHILYSKEDATKGKFAFTTEDYDMFEVCFESKGT
GRIPDQLVILDMKHGVEAKNYEEIAKVEKLPLEVELRRLEDLSESIVNDFAYMKK
20 REEEMRDTNESTNTRVLYFSIFSMFCLIGLATWQVFYLRFFKAKKLIE

SEQ ID No: 31 (VLCAD)

MSGCGLFLRTTAAARACRGLVVSTANRRLLRTSPPVRAFAKELFLGKIKKKEVFPF
PEVSQDELNEINQFLGPVEKFFTEEVDNRKIDQEGKIPDETLEKLKSLGLFGLQVPEE
25 YGGLGFSNTMYSRLGEIISMDGSITVTLAAHQAGLKGILAGTEEQKAKYLPKLAS
GEHIAAFCLTEPASGSDAASIRSRATLSEDKKHYILNGSKVWITNGGLANIFTVFAK
TEVVDSGDSVKDKITAFIVERDFGGVTNGKPEDKLGIRGSNTCEVHFENTKIPVENI
LGEVGDGFKVAMNIIINSGRFSMGSVVAGLLKRLIEMTAEYACTRKQFNKRLSEFG
LIQEKFALMAQKAYVMESMTYLTAGMLDQPGFPDCSIEAAMVKVFSSEAAWQCV
30 SEVLQILGGLGYTRDYPYERILRDTRILLIFEGTNEILRMYIALTGLQHAGRILTTRI
ELKQAKVSTVMDTVGRRLRDSLGRTVDLGLTGNGHGVVHPSLADSANKFEENTYC
FGRTVETLLLRFGKTIMEEQVLKRVANILINLYGMTAVLSRASRSIRIGLRNHDHE

VLLANTFCVEAYLQNLFSLSQLDKYAPENLDEQIKKVSQQILEKRAYICAHPLDRT
C

SEQ ID No: 32 (YME1L1)

5 MFSLSSTVQPQVTVPLSHLINAFTPKNTSVSLSGVSVSQNQHRDVVPEHEAPSSEP
SLNLRDLGLSELKIGQIDQLVENLLPGFCKGKNISSHWHTSHVSAQSFFENKYGNL
DIFSTLRSSCLYRHHSRALQSICSDLQYWPVFIQSRGFKTLKSRTRRLQSTSERLAET
QNIAPSFVKGFLLRDRGSDVESLDKLMKTKNIPEAHQDAFKTGFAEGFLKAQALT
QKTNDSLRRTRLILFVLLLFGIYGLLKNPFLSVRFRTTTGLDSAVIDPVQMKNVTFE
10 HVKGVVEEAKQELQEVVEFLKNPQKFTILGGKLPKGILLVGPPGTGKTLLARAVAG
EADVPFYYASGSEFDEMFGVGVGASRIRNLFREAKANAPCVIFIDELDSVGGKRIESP
MHPYSRQTINQLLAEMDGFKNPEGVIIIATNFPEALDNALIRPGRFDMQVTVPRP
DVKGRTEILKWYLNKIKFDQSVDEIARGTVGFSGAELENLVNQAALKAADVKGK
EMVTMKELEFSKDKILMGPERRSVEIDNKNKTITAYHESGHAILAYYTKDAMPINK
15 ATIMPRGPTLGHVSLLPENDRWNETRAQLLAQMDVSMGGRVAEELIFGTDHITTG
ASSDFDNATKIAKRMVTKFGMSEKLGVM TYSDTGKLSPETQSAIEQEIRILLRDSY
ERAKHILKTHAKEHKNLAEALLTYETLDAKEIQIVLEGKKLEVR

SEQ ID No: 33 (LAPTM4B)

20 MVNYAWAGRSQRKLWWRSVAVLTCCKSVVRPGYRGGLQARRSTLLKTCARARA
TAPGAMKMVAPWTRFYSNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADP
DQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGAYKQRAAWIIPFFC
YQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIL
TFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPP
25 PYVSA

SEQ ID No: 34 (S100alpha)

MGSELETAMETLINVFHAHSGKEGDYKLSKKELKELLQTELSGFLDAQKDVDA
VDKVMKELDENG DGEVDFQEYVVLVAALTVACNNFFWENS

30

SEQ ID No:35 (Cadherin EGF LAG seven-pass G-tpe receptor 2)

MRSPATGVPLPTPPPPLLLLLLLLLLPPPLLGDQVGPCRSLSRGRGSSGACAPMGW
LCPSSASNLWLYTSRCRDAGTELTGHLVPHHDGLRVWCPESEAHIPPLPAPEGCPW
SCRLLGIGGHLSPQGKLTLP EEHPCLKAPRLRCQSKLAQAPGLRAGERSPEESLG
GRRKRVNTAPQFQPPSYQATVPENQPA GTPVASLRAIDPDEGEAGRLEYTMDAL
5 FDSRSNQFFSLDPVTGAVTTAEELDRETKSTHVFRVTAQDHGMPRRSALATLTILV
TDTNDHDPVFEQQEYKESLRENLEVGYEVLTVRATDGDAPPNANILYRLLEGSSG
SPSEVF EIDPRSGVIRTRGPVDREEVESYQLTVEASDQGRDPGPRSTTAAVFLSVED
DNDNAPQFSEKRYVVQVREDVTPGAPVLRVTASDRDKGSNAV VHYSIMSGNARG
QFYLDAQTGALDVVSPLDYETTKEYTLRVRAQDGGRPPLSNVSGLVTVQVLDIND
10 NAPIFVSTPFQATVLESVPLGYLVLHVQAIDADAGDNARLEYRLAGVGHDFPFTIN
NGTGWISVAAELDREEVD FYSFGVEARDHGTPALTASASVSVTVLDVNDNNPTFT
QPEYTVRLNEDAAVGTSVVTVSAVDRDAH SVITYQITSGNTRNRFSITSQSGGGLV
SLALPLDYKLERQYVLA VTASDGTRQDTAQIVNVNTDANTHRPVFQSSHYTVNV
NEDRPAGTTVVLISATDEDTGENARITYFMEDSIPQFRIDADTGAVTTQAELDYED
15 QVSYTLAITARDNGIPQKSDTTYLEILVNDVNDNAPQFLRDSYQGSVYEDVPPFTS
VLQISATDRDSGLNGRVFYTFQGGDDGDGDFIVESTSGIVRTLRLRDRENV AQYVL
RAYAVDKGMPPARTPMEVTVTVLDVNDNPPVFEQDEFDVFVEENSPIGLAVARVT
ATDPDEGTNAQIMYQIVEGNIPEVFQLDIFSGELTALVDLDYEDRPEYVLVIQATSA
PLVSRATVHVRLLDRNDNPPVLGNFEILFN NYVTNRSSSFPGGAIGRVPAHDPDISD
20 SLTYSFERGNELSLVLLNASTGELKLSRALDNNRPLEAIMSVLVSDGVH SVTAQCA
LRVTITDEMLTHSITLRLEDMSPERFLSPLLGLFIQAV AATLATPPDHVVVFNVQR
DTDAPGGHILNVSLSVGQPPGPGGGPPFLPSED LQERLYLNRSLT AISAQRVLPFD
DNICLREPCENYMRCVSVLRFDSSAPFIASSSVLFRPIHPVGGLRCRCPPGFTGDYC
ETEVDLCYSRPCGPHGRCRSREGGYTCLCRDGYTGEHCEVSARSGRCTPGVCKNG
25 GTCVNLLVGGFKCDCPSGDFEKP YCQVTTRSFP AHSFITFRGLRQRFHFTLALS FAT
KERDGLLLYNGRFNEKHDFVALEVIQE QVQLTFSAGESTTTVSPFVPGGVSDGQW
HTVQLKYYNKPLL GQTGLPQGPSEQKVA VVTVDGCDTGVALRFGSVLGNYS CAA
QGTQGGSKKSLDLTG PLLGGVPDLPESFPVRMRQFVGCMRNLQVDSRHIDMADF
IANNGTVPGCPAKKNVCDSNTCHNGGTCVNQWDAFSCECPLGFGGKSCAQEMAN
30 PQHFLGSSLVAWHGLSLPISQPWYLSLMFRTRQADGVLLQA ITRGRSTITLQLREG
HVMLSVEGTGLQASSLRLEPGRANDGDWHHAQLALGASGGPGHAILSFDY GQQR
AEGNLGPR LHGLHLSNITVGGIPGPAGGVARGFRGCLQGVRVSDTPEGVNSLDPSH

GESINVEQGCSLPDPCDSNPCPANSYCSNDWDSYSCSCDPGYYGDNCTNVCDLNP
CEHQSVCTRKPSAPHGYTCECPPNYLGPYCETRIDQPCPRGWWGHPTCGPCNCDV
SKGFDPDCNKTSGECHCKENHYRPPGSPTCLLCDCYPTGSLSRVCDPEDGQCPCPKP
GVIGRQCDRCDNPF AEVTTNGCEVNYDSCPRAIEAGIWWPRTRFGLPAAAPCPKG
5 SFGTAVRHCD EHRGWLPPNLFNCT SITFSELKGFAERLQRNESGLDSGRSQQLALL
LRNATQHTAGYFGSDVKVAYQLATRLLAHESTQRGFGLSATQDVHFTENLLRVG
SALLDTANKRHWELIQQTEGGTAWLLQH YEAYASALAQNMRHTYLSPTTIVTPNI
VISVVRLDKGNFAGAKLPRYEALRGEQPPDLETTVILPESVFRETTPPVVRPAGPGEA
QEPEELARRQRRHPELSQGEAVASVITYRTL AGLLPHNYDPDKRSLRVPKRPIINTP
10 VVSISVHDDEELLPRALDKPVTVQFRLL ETEERTK PICVFWNHSILVSGTGGWSAR
GCEVVFRNESHVSCQCNHMTSFAVLMDVSRREN GEILPLKTLTYVALGVTLAALL
LTFFFLTLRLRSNQHGIRRNLTAA LGLAQLVFL LGINQADLPFACTVIAILLHFLY
LCTFSWALLEALHLYRALTEVRDVNTGPMRFY YMLGWGVPAFTTGLAVGLDPEG
YGNPDFCWLSIYDTLIWSFAGPVAF AVSMSVFLYILAARASCAAQRQGFEEKGPV
15 SGLQPSFAVLLLLSATWLLALLSVNSDTLL FHYL FATCNCIQGPFI FL SYVVLSKEV
RKALKLACSRKPSDPALT TKSTLTSSYNCPSPYADGR LYQPYGDSAGSLHSTSR
GKSQPSYIPFLLREESALNPGQGPPGLGDPGSLFLEGQDQQHDPD TSDSDLSLEDD
QSGSYASTHSSDSEEEEEEEEEEEA AFPGEQGWDSLLGPGAERLPLHSTPKDGGPGP
GKAPWPGDFGTTAKESSGNGAPEERLRENGDALSREGSLGPLPGSSAQPHKGILKK
20 KCLPTISEKSSLLRLPLEQCTGSSRGSSASEGSRGGPPPRPPPRQSLQEQLNGVMPIA
MSIKAGTVDEDSSGSEFLFFNFLH

SEQ ID No:36 (Calsyntenin)

MLRRPAPALAPAARLLL AGLLCGGGVWAARVNKH KPWLEPTYHGI VTENDNTVL
25 LDPPLIALDKDAPLRFAESFEVTVTKEGEICGFKIHGQNPFD AVVVDKSTGEGVIR
SKEKLDCELQKDYSFTIQAYDCGKGPDGTVNKKSHKATVHIQVNDVNEYAPVFK
EKSYKATVIEGKQYDSILRVEAVDADCSPQFSQICSYEITPDVPFTVDK DGYIKNTE
KLNYGKEHQYKLTVTAYDCGKKRATEDVLVKISIKPTCTPGWQGWNNRIEYEPG
TGALAVFPNIHLETCD EPPVASVQATVELETSHIGKGCDRDTYSEKSLHRLCGAAAG
30 TAELLPSPSGSLNWTMGLPTDNGHDS DQVFEFNGTQAVRIPDGVVSVSPKEPFTIS
VWMRHGPFGRKKETILCSSDKTDMNRHHYSLYVHGCRLIFLFRQDPSEEKKYRPA
EFHWKLNQVCDEEWHHYVLNVEFPSVTLYVDGTSHEPFSVTEDYPLHPSKIETQL

VVGACWQEFSGVENDNETEPVTVASAGGDLHMTQFFRGNLAGLTLRSGKLADKK
VIDCLYTCKEGLDLQVLEDSEGRGVQIQAHPSQLVLTLEGEDLGELDKAMQHISYL
NSRQFPTPGIRRLKITSTIKCFNEATCISVPPVDGYVMVLQPEEPKISLSGVHHFARA
ASEFESSEGVFLFPELRIISTITREVEPEGDGAEDPTVQESLVSEEIVHDLDTC EVTVE
5 GEELNHEQESLEVDMARLQQKGIEVSSSELGMTFTGVDTMASYEEVLHLLRYRN
WHARSLDRKFKLICSELNGRYISNEFKVEVNVIIHTANPMEHANHMAAQPQFVHP
EHRSFVDLSGHNLANPHPFVVPSTATVVIVVCVSFLVFMILGVFRIRAAHRRTM
RDQDTGKENEMDWDDSAITITVNPMEYEDQHSSEEEEEEEEEEESEDGEEEDDIT
SAESESSEEEEGEQGDPQNA TRQQQLEWDDSTLSY

10

SEQ ID No: 37 (visinin-like 1)

MGKQNSKLAPVEMEDLVKSTEFNEHELKQWYKGFLKDCPSGRLNLEEFQQLYVK
FFPYGDASKFAQHAFRTFDKNGDGTIDFREFICALSITSRGSFEQKLNWAFNMYDL
DGDGKITR VEMLEIIEAIYKMVGTVIMMKMNEDGLTPEQRVDKIFSKMDKNKDD
15 QITLDEFKEAAKSDPSIVLLLQCDIQK

SEQ ID No: 38 (BACE1)

MAQALPWLLLWMGAGVLP AHGTQH GIRLPLRSGLGGA PLGLRLPRETDEEPEEPG
RRGSFVEMVDNLRGKSGQGYVEMTVGSPQTLN ILVDTGSSNFAVGAAPHPFLH
20 RYYQRQLSSTYRDLRKG VYVPYTQ GKWEGELGTDLLCGAGFPLNQSEVLASVGG
SMIIGGIDHSLYTGSLWYTPIRREWY YEVIIVRVEINGQDLKMDCKEYNYDKSIVDS
GTTNLR LPKKVFEAAVKS IKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISL
YLMGEVTNQSFRTILPQQYLRPVEDVATSQDDCYKFAISQSSTGTVMGAVIMEGF
YVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPQTDESTLMT
25 IAYVMAAICALFMLPLCLMVCQWRCLRLRQQHDDFADDISLLK

SEQ ID No: 39 (CELSR2)

MRS PATGVPLPTPPP LLLLLLLLLLPPPLLGDQVGPCRS LGSRGRGSSGACAPMGW
LCPSSASNLWLYTSRCRDAGTEL TGHLVPHHDGLRVWCPESEAHIP LPPAPEGCP
30 WSCRL LGIGGHLSPQGKLTLP EEHPCLKAPRLRCQSCKLAQAPGLRAGERSPEESL
GGRRKRNVTAPQFQPPSYQATVPENQ PAGTPVASLRAIDPDEGEAGRLEYTMDA
LFD SRSNQFFSLDPVTGAVTTAEELDRETKSTHVFRVTAQDHGMPRRSALATLTIL

VTDTNDHDPVFEQQEYKESLRENLEVGYEVLTVRATDGDAPPNANILYRLLEGSG
GSPSEVFEIDPRSGVIRTRGPVDREEVESYQLTVEASDQGRDPGPRSTTAAVFLSVE
DDNDNAPQFSEKRYVVQVREDVTPGAPVLRVTASDRDKGSNAVHYSIMSGNAR
GQFYLDAQTGALDVVSPLDYETTKEYTLRVRAQDGGRPPLSNVSGLVTVQVLDIN
5 DNAPIFVSTPFQATVLESVPLGYLVLHVQAIDADAGDNARLEYRLAGVGHDFPFTI
NNGTGWISVAAELDREEVDFYSFGVEARDHGTALTASASVSVTVLVDVNDNNPTF
TQPEYTVRLNEDAAVGTSVVTVSAVDRDAH SVITYQITSGNTRNRFSITSQSGGGL
VSLALPLDYKLERQYVLA VTASDGTRQDTAQIVNVNVDANTHRPVFQSSHYTVN
VNEDRPAGTTVVLISATDED TGENARITYFMEDSIPQFRIDADTGAVTTQAELDYE
10 DQVSYTLAITARDNGIPQKSDTTYLEILVNDVNDNAPQFLRDSYQGSVYEDVPPFT
SVLQISATDRDSGLNGRVFYTFQGGDDGDGDFIVESTSGIVRTLRLDRENV AQYV
LRA YAVDKGMPPARTPMEVTVTVLVDVNDNPPVFEQDEFDVFVEENSPIGLAVAR
VTATDPDEGTNAQIMYQIVEGNIPEVFQLDIFSGELTALVDLDYEDRPEYVLVIQAT
SAPLVSRATVHVRLLDNRNDNPPVLGNFEILFN NYVTNRSSSFPGGAIGRVPAHDPDI
15 SDSLTYSFERGNELSLVLLNASTGELKLSRALDNNRPLEAIMSVLVSDGVH SVTAQ
CALRV TITTEMLTHSITLRL EDMSPERFLSPLLGLFIQAVAATLATPPDHVVVFNV
QRDTDAPGGHILNVSL SVGQPPGPGGGPPFLPSED LQERLYLNRSLLT AISAQRVLP
FDDNICLREPCENYMRCVSVLRFDSSAPFIASSSVLFRPIHPVGGLRCRCPPGFTGD
YCETEVDLCYSRPCGPHGRCSREGGYTCLCRDGYTGEHCEVSARSGRCTPGVCK
20 NGGTCVNLLVGGFKCDCPSGDFEKP YCQVTTRSFP AHSFITFRGLRQRHFHTLALS
FATKERDGLLLYNGRFNEKHDFVALEVIQE QVQLTFSAGESTTTVSPFVPGGVSDG
QWHTVQLKYYNKPLL GQTGLPQGPSEQKVA VVTVDGCDTGVALRFGSVLGNYS
CAAQGTQGGSKKSLDLTGPLLGGVPDLPESFPVRMRQFVGCMRNLQVDSRHID
MADFIANNGTVPGCPAKKNVCDSENTCHNGGTCVNQWDAFSCECPLGFGGKSCAQ
25 EMANPQHFLGSSLVA WHGLSLPISQPWYLSLMFRTRQADGVLLQAITRGRSTITLQ
LREGHVMLSVEGTGLQASSLRLEPGRANDGDWHHAQLALGASGGPGHAILSFDY
GQQR AEGNLGPRLHGLHLSNITVGGIPGPAGGVARGFRGCLQGVRVSDTPEGVNS
LDPSHGESINVEQGCSLPDPCDSNPCPANSYCSNDWDSYSCSCDPGY YGDNCTNV
CDLNPCEHQSVCTRKPSAPHGYTCECPPNYLGPYCETRIDQPCPRGWWGHPTCGP
30 CNCDVSKGFDPDCNKTSGECHCKENHYRPPGSPTCLLCD CYPTGSLSRVCDPEDG
QCPCKPGVIGRQCDRC DNPF AEVT TNGCEVNYDSCPRAIEAGIWWPRTRFGLPAA
APCPKGSFGTAVRHCDEHRGWLPPNLFNCT SITFSELKGFAERLQRNESGLDSGRS

QQLALLRNATQHTAGYFGSDVKVAYQLATRLLAHESTQRGFGLSATQDVHFTE
NLLRVGSALLDTANKRHWELIQQTEGGTAWLLQHYEAYASALAQNMRYHTYLSPF
TIVTPNIVISVVRLDKGNFAGAKLPRYEALRGEQPPDLETTVILPESVFRETTPPVVRP
AGPGEAQEPEELARRQRRHPELSQGEAVASVIIYRTLGLLPHNYDPDKRSLRVPK
5 RPIINTPVVSISVHDDEELLPRALDKPVTVQFRLLTEERTKPKICVFWNHSILVSGTG
GWSARGCEVVFRNESHVSCQCNHMTSFAVLMDVSRRENGEILPLKTLTYVALGV
TLAALLLTFFFLTLLRILRSNQHGIRRNLTAAALGLAQLVFLGGINQADLPFACTVIAI
LLHFLYLCTFSWALLEALHLYRALTEVRDVNTGPMRFYMYLWGWVPAFITGLAV
GLDPEGYGNPDFCWLSIYDTLIWSFAGPVAFVSMVFLYILAARASCAAQRQGF
10 EKKGPVSGLQPSFAVLLLLSATWLLALLSVNSDTLLFHLYFATCNCIQGPFFILSYV
VLSKEVRKALKLACSRKPSDPALTTKSTLTSSYNCPSPYADGRLYQPYGDSAGSL
HSTSRSGKSQPSYIPFLREESALNPGQGPPGLGDPGSLFLEGQDQQHDPDSDSDSD
LSLEDDQSGSYASTHSSDSEEEEEEEEEEEAAFPGEQGWDSLLGPGAERLPLHSTPK
DGGPGPGKAPWPGDFGTAKESSGNGAPEERLRENGDALSREGSLGPLPGSSAQF
15 HKGILKKKCLPTISEKSSLLRPLEQCTGSSRGSSASEGSRGGPPPPRPPPRQSLQEQ
NGVMPIAMSIKAGTVDEDSSGSEFLFFNFLH

SEQ ID No: 40 (FADS2)

MGKGGNQGEAAEREVSVPFTFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
20 GGQRVIGHYAGEDATDAFRAHPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
EDFRALRKTAEEDMNLFKTNHVFFLLLLAHIALESIAWFTVFYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHVFVLGEWQPIEYGGKKLKYLPYNHQHEYFFLIGPPLLI
PMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYIPFYGILGALLFLNFIRFLESH
25 WFVWVTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWFSGHLNFQIEHH
LFPTMPRHNLHKIAPLVKSLCAKHGIEYQEKPLLRAILLDIRSLKKSGKLWLDAYL
HK

SEQ ID No: 41 (NogoA)

30 MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEEEDEDEDLEEEVLER
TEFSELEYSEMGSFSVSPKAESAIVIVANPREEIVKKNDEEEKLVSNILHNQQELP
TALTCLVKEDEVVSSEKAKDSFNEKRVAVEAPMREEYADFKPFERVWEVKDSKE

DSDMLAAGGKIESNLESKVDDKKCFADSLEQTNHEKDSSESNDDTSFPSTPEGIKDR
SGAYTTCAPFNPAATESIATNIFLLGDPTSENKTDEKKIEEKKAAQIVTEKNTSTKTS
NPFLVAAQDSETDYVTTDNLTKVTEEVVANMPEGLTPDLVQEACESELNEVTGTK
IAYETKMDLVQTSEVMQESLYPAAQLCPSFEESEATPSPVLPDIVMEAPLNSAVPS
5 AGASVIQPSSSPLEASSVNYESIKHEPENPPPYEEAMSVSLKKVSGIKEEIKEPENIN
AALQETEAPYISIACDLIKETKLSAEPAPDFSDYSEMAKVEQVDPDHSELVEDSSPD
SEPVDLFSDDSDPDVPQKQDETVMMLVKESLTETSFESMIEYENKEKLSALPPEGGKP
YLESFKLSLDNTKDTLLPDEVSTLSKKEKIPLQMEELSTAVYSNDDLFIKSEAQIRE
TETFSDDSSPIEIDEFPTLISSKTDSFSKLAREYTDLEVSHKSEIANAPDGAGSLPCTEL
10 PHDLSLKNIQPKVEEKISFSDDFSNGSATSQVLLLPDVSALATQAEIESIVKPKVL
VKEAEKKLPDTEKEDRSPSAIFSAELSKTSVVDLLYWRDIKKTGVVFGASLFLLLS
LTVFSIVSVTAYIALALLSVTISFRIYKGVIAIQKSDEGHPFRAYLESEVAISEELVQ
KYSNSALGHVNCTIKELRRLFLVDDLVDLSLKFVLMWVFTYVGALFNGLTLLILA
LISLFSVPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

15

SEQ ID No: 42 (OS-9)

MAAETLLSSLLGLLLLGLLLLPASLTGGVGSNLLEELSEMRYGIEILPLPVMGGQSQS
SDVVIVSSKYKQRYECRLPAGAIHFQREEREETPAYQGPGIPELLSPMRDAPCLLKT
KDWWTYEFCYGRHIQQYHMEDSEIKGEVLYLGYYSQAFDWDDetakaskQHRL
20 KRYHSQTYGNGSKCDLNGRPREAEVRFLCDEGAGISGDYIDRVDEPLSCSYVLTIR
TPRLCPHPLLRPPPSAAPQAILCHPSLQPEEYMAVYVQRQAVDSKQYGDKIIEELQDL
GPQVWSETKSGVAPQKMAGASPTKDDSKDSDFWKMLNEPEDQAPGGEEVPAEE
QDPSPEAADSASGAPNDFQNNVQVKVIRSPADLIRFIEELKGGTKKKGKPNIGQEQP
VDDAAEVPQREPEKERGDPERQREMEEEDEDEDEDEDEDERQLLGEFEKELEGIL
25 LPSDRDRLRSEVKAGMERELENIIQEASPALPTEKELDPDGLKKESERDRAMLAL
TSTLNKLIKRLKQSPQELVKKHKKKRVPKPPSPQPTTEEDPEHRVRVRVTCLR
LGGPNQDLTVLEMKRENQKQIEGLVKELLEREGLTAAAGKIEIKIVRPWAEGTEE
GARWLTDEDTRNLKEIFFNILVPGAEEAQKERQRQKELESNYRRVWGSPGGEGTG
DLDEFDF

30

SEQ ID No: 43 (PDGFRB)

MRLPGAMPALALKGELLILLSLLLLLEPQISQGLVVTTPGPPELVLNVSSTFVLTCSSGS
APVVWERMSQEPPQEMAKAQDGTFFSVLTLTNLTGLDTGEYFCTHNSRGLETDE
RKRLYIFVPDPTVGFLPNDAEELFIFLTEITEITPCRVTDQPQLVVTLHEKKGDVALP
VPYDHQRGFGSIFEDRSYICKTTIGDREVDSDAYYVYRLQVSSINVSNAVQTVVR
5 QGENTILMCIVIGNEVVNFETYPRKEVIGRLVEPVTDFLLDMPYHIRSILHIPS AEL
EDSGTYTCNVTESVNDHQDEKAINITVVESGYVRLLEGEVGTQLQFAELHRSRTLQV
VFEAYPPPTVLWFKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGH
YTMRAFHEDA EVQLSFQLQINVPVRVLELSESHPDSSGEQTVRCRGRGMPQPNIWS
ACRDLKRCPRELPPTLLGNSSEEEESQLETNVTYWEEEQEFVVSTLRLQHVDRLPS
10 VRCTLRNAVGDQTQEVIVPHSLPFKVVVISAILALVVLTIISLILIMLWQKKPRYE
IRWKVIESVSSDGHEYTYVDPMQLPYDSTWELPRDQLVLGRTLGSAGFGQVVEAT
AHGLSHSQATMKVAVKMLKSTARSSKQALMSELKIMSHLGPLNVNLLGACT
KGGPIYITTEYCRYGDLVDYLHRNKHTFLQHHS DKRRPPSAELYSNALPVGLPLPS
HVSLTGESDGGYMDMSKDESVDYVPM LDMKGDVKYADIESSNYMAPYDNYVPS
15 APERTCRATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICE
GKLVKICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILL
WEIFTLGGTPYPELPMNEQFYNAIKRGYRMAQPAHASDEIYEIMQKCWEEKFEIRP
PFSQLVLLLERLLGEGYKKKYQQVDEEFLRSDHPAILRSQARLPGFHGLRSPLDTSS
VLYTAVQPNEGDNDYIPLPDPKPEVADEGPLEGSPSLASSTLNEVNTSSTISCDSP
20 EPQDEPEPEPQLELQVEPEPELEQLPDSGCPAPRAEAEDSFL

SEQ ID No: 44 (PTK7)

MGAARGSPARPRRLPLLSVLLLPLGGTQTAIVFIKQPSSQDALQGRALLRCEVE
APGPVHVYWLLDGAPVQDTERFAQGSSLSFAAVDRLQDSGTFQCVARDDVTGE
25 EARSANASFNIKWIEAGPVVLKHPASEAEIQPQTQVTLRCHIDGHPRPTYQWFRDG
TPLSDGQSNHTVSSKERNLTLRPAGPEHSGLYSCCAHSAFGQACSSQNFTLSIADES
FARVVLAPQDVVVAR YEEAMFHCQFSAQPPPSLQWLFEDETPITNRSRPPHLRRAT
VFANGSLLLTQVRPRNAGIYRCIGQGQRGPPILEATLHLAEIEDMPLFEPRVFTAGS
EERVTC LPPKGLPEPSVWWEHAGVRLPTHGRVYQKGHELVLANIAESDAGVYTC
30 HAANLAGQRRQDVNITVATVPSWLKKPQDSQLEEGKPGYLDCLTQATPKPTVVW
YRNQMLISED SRFEVFKNGTLRINSVEVYDGTWYRCMSSTPAGSIEA QARVQVLE
KLKFTPPPQQQCMEFDKEATVPCSATGREKPTIKWERADGSSLP EWVTDNAGTL

HFARVTRDDAGNYTCIASNGPQGQIRAHVQLTVAVFITFKVEPERTTVYQGHTAL
LQCEAQGDPKPLIQWKGKDRILDPTKLGPRMHIFQNGSLVIHDVAPEDSGRYTCIA
GNSCNIKHTEAPLYVVDKPVPEESEGPGSPPPYKMIQTIGLSVGAAVAYIIAVLGLM
FYCKKRCKAKRLQKQPEGEEPEMECLNGGPLQNGQPSAEIQEEVALTSLGSGPAA
5 TNKRHSTSDKMHFPRSSLQPITTLGKSEFGEVFLAKAQGLEEGVAETLVLVKSLQS
KDEQQQLDFRRELEMFGKLNHANVVRLLGLCREAEPHYMVLEYVDLGDLDKQFLR
ISKSKDEKLKSQPLSTKQKVALCTQVALGMEHLSNNRFVHKDLAARNCLVSAQR
QVKVSALGLSKDVYNSEYYHFRQAWVPLRWMSPEAILEGDFSTKSDVWAFGV
MWEVFTHGEMPHGGQADDEV LADLQAGKARLPQPEGCP SKLYRLMQRCWALSP
10 KDRPSFSEIASALGDSTVDSKP

SEQ ID No: 45 (UGCGL1)

MGCKGDASGACAAGALPVTGVCYKMGVLVVLTVLWLFSSVKADSKAITTSLTTK
WFSTPLLEASEFLAEDSQEKFWNFVEASQNGSSDHDGTDYSYYHAILEAAFQFL
15 SPLQQNLFKFCLSLRSYSATIQAFFQIAADEPPPEG CNSFFSVHGKKTCESDTLEAL
LLTASERPKPLLFKGDHRYPSSNPESPVVIFYSEIGSEEF SNFHRQLISKSNAGKINY
VFRHYIFNPRKEPVYLSGYGVELAIKSTEYKAKDDTQVKGTEVNTTVIGENDPIDE
VQGFLFGKLRDLHPDLEGQLKELRKHLVESTNEMAPLKVWQLQDLSFQTAARILA
SPVELALVVMKDLSQNFPTKARAITKTAVSSEL RTEVEENQKYFKGTLGLQPGDS
20 ALFINGLHMDLDTQDIFSLFDVLRNEARVMEGLHRLGIEGLSLHNVLKLNIPSEA
DYAVDIRSPAISWVNNLEVDSRYNSWPSSLQELLRPTFFGVIRQIRKNLHNMFVIV
DPAHETTAELMNTAEMFLSNHIPLRIGFIFVNDSEDVDGMQDAGVAVLRAYNVY
AQEVDDYHAFQTLTHIYNKVRTGEKVKVEHVVSVLEKKYPYVEVNSILGIDSAYD
RNRKEARGYYEQTG VGPLPVVLFNGMPFEREQ LDPDELETITMHKILETTTFFQRA
25 VYLGELPHDQDVVEYIMNQPNVVRINSRILTAERDYDLTASNFFVDDYARFTI
LDSQGKTA AVANSMNYLTKKGMSSKEIYDDSFIRPVTFWIVGDFDSPSGRQLLYD
AIKHQKSSNNVRISMINNPAKEISYENTQISR AIWAALQTQTSNAAKNFITKMAKE
GAAEALAAGADIAEFSVGGMDFSLFKEVFESSKMDFILSHAVYCRDVLKLLKKGQR
AVISNGRIIGPLEDSELFNQDDFHLL ENILKTSGQKIKSHIQQLRVEEDVASDLVMK
30 VDALLSAQPKGDPRIEYQFFEDRHS AIKLRPKEGETYFDVVA VVDPVTRE AQR LAP
LLL VLAQLINMNL RVFMNCQSKLSDMPLKSFYRYVLEPEISFTSDNSFAKGPIAKFL
DMPQSPLFTLNLNTPESWMVESVRTPYDL DNIYLEEVDSVVA AEYELEYLLLEGH

CYDITTGQPPRGLQFTLGTSANPVIVDTIVMANLGYFQLKANPGA WILRLRKGRSE
DIYRIYSHDGTDSPPDADEVVIVLNNFKSKIHKVKVQKKADMVNEDLLSDGTSENE
SGFWDSFKWGFTGQKTEEVKQDKDDIINIFSVASGHLYERFLRMMLSVLKNTKTP
VKFWFLKNYLSPTFKEFIPYMANEYNFQYELVQYKWPRWLHQQTEKQRIIWGYKI
5 LFLDVLFPPLVVDKFLFVDADQIVRTDLKELRDFNLDGAPYGYTPFCDSRREMDGY
RFWKSGYWASHLAGRKYHISALYVVDLKKFRKIAAGDRLRGQYQGLSQDPNSLS
NLDQDLPNNMIHQVPIKSLPQEWLWCETWCDDASKKRAKTIDLCNNPMTKEPKL
EAAVRIVPEWQDYDQEIQLQIRFQKEKETGALYKEKTKEPSREGPQKREEL

10 SEQ ID No: 46 (CtnnB1)

MATQADLMELDMAMEPDRKAAVSHWQQQSYLD SGIHSGATTTAPSLSGKGNPEE
EDVDTSQVLYEWEQGFSSQFTQE QVADIDGQYAMTRAQVR AAMFPETLDEGM
QIPSTQFDAAHPTNVQRLAEP SQMLKHAVVN LINYQDDAELATRAIPELTKLLNDE
15 DQVVVNKAAVMVHQLSKKEASRHAIMRSPQMVS AIVRTMQNTNDVETARCTAG
TLHNLSHHREGLLAIFKSGGIPALVKMLGSPVDSVLFYA ITTLHNLLLHQEGAKMA
VRLAGGLQKMVALLNKTNVKFLA ITTDCQLAYGNQESKL IILASGGPQALVNIM
RTYTYEKLLWTTSRVLKVL SVCSSNKPAIVEAGGMQALGLH L TDPSQRLVQNCL
WTLRNLSDAATKQEGMEGLLGT LVQLLGSDDINVTCAAGILSNL TCNNYKNKM
MVCQVGGIEALVRTVLRAGDREDITEPAICALRH L TS RHQEAEMAQNAVRLHYGL
20 PVVVKLLHPPSHWPLIKATVGLIRNLALCPANHAPLREQGAIPRLVQLLVRAHQDT
QRR TSMGGTQQQFVEGVRMEEIVEGCTGALHILARDVHN RIVIRGLNTIPLFVQLL
YSPIENIQRVAAGVLCELAQDKEAAEAIEAEGATA PLTELLHSRNEGVATYAAA VL
FRMSDKPQDYKKRLSVELTSS LFRTEPMAWNETADLGLDIGAQGEPLGYRQDDP
SYRSFHSGGYGQDALGMDPMMEHEMGGHHPGADY PVDGLPDLGHAQDLMDGL
25 PPGDSNQLAWFDTDL

SEQ ID No: 47 (CtnnA1)

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVT TLVNTNSKGPSNKKRGRS
KKAHVLAASVEQATENFLEKGD KIAKESQFLKEELVVA VEDVRKQGDLMKAAAG
30 EFADDPCSSVKRGNMVRAAPALLSAVTRLLILADMA DVYKLLVQLKVVEDGILKL
RNAGNEQDLGNQYKALKPEVDKLNIMAAKRQQELKDVGH RDQMAAARGILQSN
VPILYTASQACLQHPDVAAYKANRD LIYKQLQQA V TGISNAAQATASDDASQHQ

GGGGGELAYALNNFDKQIIVDPLSFSEERFRPSLEERLESIISGAALMADSSCTRDD
RRERIVAECNAVRQACRTCVCSEYMGNAGRKERSDALNSAIDKMTKKTRDLRRQL
RKAVMDHVSDFSLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLA
CSISNNEEGVKLVRMSASQLEAGCPQVINAATWALAPKPQSKLAQENMDLFKEQ
5 WEKQVRVLTDVDDITSIDDFLAVSENHILEDVNKCVIALQEKDVGDLDRTAGAI
RGRAARVIHVVTSEMDNYEPGVYTEKMLEATKLLSNTVMPRFTEQVEAAVEALSS
DPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPEELDDSDFETEDFDVRSETSVQ
TEDDQLIAGQSARAIMAQLPQEQKAKIREQVASFQEEKSKLDAEVSKWDDSGNDII
VLAKQMCMMEMMTDFTRGKGPLKNTSDVISAACKIAEAGSRMDKLGRTIRDHC
10 PDSACKQDLLAYLQRIALYCHQLNICKSVKAEVQNLGGELVVSNGCDTCGALQGL
KGWPPPLCLATHWVDSAMSLIQAANKLMNAVVTQTVKASYVASTKYQKSQGMAS
LNLPAVSMKMKAPEKKPLVKREKQDETQTKIKRASQKKHVNVPVQALSEFKAMDS
I

15 SEQ ID No: 48 (CtnnA2)

MTSATSPIILKWDPKSLEIRTLTVERLLEPLVTQVTTLVNTSNKGPSGKKKGRSKKA
HVLAASVEQATQNFLEKGEQIAKESQDLKEELVAAVEDVRKQGETMRIASSEFAD
DPCSSVKRGTMVRAARALLSAVTRLLILADMADVMRLLSHLKIVEEALEAVKNAT
NEQDLANRFKEFGKKMVKLNYVAARRQQELKDPHCRDEMAAARGALKKNATM
20 LYTASQAFLRHPDVAATRANRDYVFKQVQEAIGISNAAQATSPTDEAKGHTGIG
ELAAALNEFDNKIILDPMTFSEARFRPSLEERLESIISGAALMADSSCTRDDRRERIV
AECNAVRQALQDLLSEYMNNTGRKEKGDPLNIAIDKMTKKTRDLRRQLRKAVM
DHISDFSLETNVPLLVLIEAAKSGNEKEVKEYAQVFREHANKLVEVANLACSSINN
EEGVKLVRMAATQIDSLCPQVINAALTAAARPQSKVAQDNMDVFKDQWEKQVR
25 VLTEAVDDITSVDDFLSVSENHILEDVNKCVIALQEGDVGDTLDRTAGAIRGRAARV
IHIINAEMENYEAGVYTEKMLEATKLLSETVMPRFAEQVEVAIEALSANVPQPFEE
NEFIDASRLVYDGVDIRKAVLMIRTPEELEDSDFEQEDYDVRRGTSVQTEDDQL
IAGQSARAIMAQLPQEEKAKIAEQVEIFHQEKSKLDAEVAKWDDSGNDIIVLAKQ
MCMMEMMTDFTRGKGPLKNTSDVINAACKIAEAGSRMDKLARAVADQCPDSA
30 CKQDLLAYLQRIALYCHQLNICKSVKAEVQNLGGELIVSGTGVQSTFTTFYEVD CD
VIDGGRASQLSTHLPTCAEGAPIGSGSSDSSMLDSATSLIQAANKLMNAVVLTVKA

SYVASTKYQKVYGTAAVNSPVVSWKMKAPEKKPLVKREKPEEFQTRVRRGSQK
KHISPVQALSEFKAMDSF

SEQ ID No: 49 (CtnnD1)

5 MDDSEVESTASILASVKEQEAQFEKLTRALEEERRHVSAQLERVRVSPQDANPLM
ANGTLTRRHQNGRFVGDADLERQKFSDLKLNQPDHSHLLYSTIPRMQEPGQIVE
TYTEEDPEGAMSVSVSVETSDDGTTRRTETT VKKVKT VTTTRTVQPVAMGPDGLP
VDASSVSNNYIQT LGRDFRKNNGGGPGPYVGQAGTATLPRNFHYPPDGYSRHYE
DGYPGGSDNYGSLSRVTRIEERYRPSMEGYRAPSRQDVYGPQPQVRVGGSSVDLH
10 RFHPEPYGLEDDQRSMGYDDLDYGMMSDYGTARRTGTPSDPRRRLRSYEDMIGE
EVPSDQYYWAPLAQHERGSLASLDSLKGGPPPPNWRQPELPEVIAMLGFRLLDAV
KSNAAYLQHLCCYRNDKVKT D VRKLKGIPVLVGLLDHPKKEVHLGACGALKNIS
FGRDQDNKIAIKNCDGVPALVRLLRKARDMDLTEVITGTLWNLSSHDSIKMEIVD
HALHALTDEVIIPHSGWEREPNEDCKPRHIEWESVLTNTAGCLRNVSSESEARRK
15 LRECDGLVDALIFIVQAEIGQKDSDSLVENCVCLLRNLSYQVHREIPQAERYQEA
APNVANNTGPHAASCFGAKKKGKGGKPIEDPANDTVDFPKRTSPARGYELLFQPEV
VRIYISLLKESKTPAILEASAGAIQNLCAGRWTYGRYIRSALRQEKALSAIADLLTN
EHERVVKAASGALRNLAVDARNKELIGKHAIPNLVKNLPGGQQNSSWNFSEDTVI
SILNTINEVIAENLEAAKKLRETQGIEKLVLINKSGNRSEKEVRAAALVLQTIWGYK
20 ELRKPLEKEGWKKSD FQVNLNNASRSQSSH SYDDSTLPLIDRNQKSDKKPDREEIQ
MSNMGSNTKSLDNNYSTPNERGDHNR TLDRSGDLGDMEPLKGTTPLMQDEGQES
LEEELDVLVLDDDEGGQVSYP SMQKI

SEQ ID No: 50 (NCadh)

25 MCRIAGALRTLPLLLALLQASVEASGEIALCKTGFPEDVYSAVLSKDVHEGQPLL
NVKFSNCNGKRKVQYESSPADFKVDEDGMVYAVRSFPLSSEHAKFLIYAQDKET
QEKWQVAVKLSLKPTLTEESVKESAEVEEIVFPRQFSKHSGLHQRQKRDWVIPPIN
LPENSRGPFQELVRIRSDRDKNLSLRYSVTGPGADQPPTGIFIINPISGQLSVTKPLD
REQUIARFHLRAHAVDINGNQVENPIDIVINVIDMNDNRPEFLHQVWNGTVPEGSKP
30 GTYVMTVTAIDADDPNALNGMLRYRIVSQAPSTPSPNMFTINNETGDIITVAAGLD
REKVQQYTLLIQATDMEGNPTYGLSNTATAVITVTDVNDNPPEFTAMTFYGEVPEN
RVDIIVANLTVTDKDQPHTPAWNNAVYRISGGDPTGRFAIQTDPNNSNDGLVTVVKPI

DFETNRMFVLTVA AENQVPLAKGIQHPPQSTATVSVTVIDVNENPYFAPNPKIIRQ
EEGLHAGTMLTTFTAQDPDRYMQQNIRYTKLSDPANWLKIDPVNGQITTIAVLDR
ESPNVKNNIYNATFLASDNGIPMSGTGTLQIYLLDINDNAPQVLPQEAETCETPDP
NSINITALDYDIDPNAGPFAFDLPLSPVTIKRNWTTITRLNGDFAQLNLKIKFLEAGIY
5 EVPIITDSGNPPKSNISILRVKVCQCDSDNGDCTDVDRIVGAGLGTGAIIAILLCIILLI
LVLMFVVWMKRRDKERQAKQLLIDPEDDVRDNILKYDEEGGGEEDQDYDLSQLQ
QPDTVEPDAIKPVGIRRMDERPIHAEPQYPVRSAAHPHGDIGDFINEGLKAADNDPT
APPYDSSLVFDYEGSGSTAGSLSSLNSSSSGGEQDYDYLNWDWGPRFKKLADMYGG
GDD

10

SEQ ID No:51 (Reelin)

MERSGWARQTFLALLLGATLRARAAAGYYPRFSPFFFLCTHHGELEGDGEQGEV
LISLHIAGNPTYYPGQYHYVTISTSTFFDGLLVTGLYTSTSVQASQSIGGSSAFGFG
IMSDHQFGNQFMCSVVASHVSHLPTTNLSFIWIAPPAGTGCVNFMATATHRGQVIF
15 KDALAQQQLCEQGAPTDVTVHPHLAEIHSDSIILRDDFDSYHQLQLNPNIWVECNNC
ETGEQCGAIMHGNAVTFCEPYGPRELITTGLNTTTASVLQFSIGSGSCRFSYSDPSII
VLYAKNNSADWIOLEKIRAPSNVSTIIHILYPEDAKGENVQFQWKQENLRVGEVY
EACWALDNILIINSAHRQVVLEDSDLPVDTGNWLFPPGATVKHSCQSDGNSIYFHG
NEGSEFNFATTRDVDLSTEDIQEQWSEEFESQPTGWDVLGAVIGTECGTIESGLSM
20 VFLKDGERKLCTPSMDTTGYGNLRFYFVMGGICDPGNSHENDIILYAKIEGRKEHI
TLDTLSYSSYKVPSLVSVVINPELQTPATKFCLRQKNHQGHNRNVWAVDFFHVLP
VLPSTMSHMIQFSINLGCCTHQPGNSVSLEFSTNHGRSWSLLHTECLPEICAGPHLP
HSTVYSSSENYSGWNRITIPNAALTRNTRIRWRQTGPILGNMWAIDNVYIGPSC
KFCSGRGQCTRHGCKCDPGFSGPACEMASQTFPMFISESFGSSRLSSYHNFYSIRGA
25 EVSFGCGVLASGKALVFNKEGRRQLITSFLDSSQSRFLQFTLRLGSKSVLSTCRAPD
QPGEVLLHYSYDNGITWKLLEHYSYLSYHEPRIISVELPGDAKQFGIQFRWWQPY
HSSQREDVWAIDEIIMTSVLFNSISLDFTNLVEVTQSLGFYLGNVQPYCGHDWTLC
FTGDSKLASSMRYVETQSMQIGASYMIQFSLVMGCGQKYTPHMDNQVKLEYSTN
HGLTWHLVQEECLPSMPSCQEFTSASIYHASEFTQWRRVIVLLPQKTWSSATRFR
30 WSQSYYYTAQDEWALDSIYIGQQCPNMCSGHGSCDHGICRCDQGYQGTECHPEAA
LPSTIMSDFENQNGWESDWQEVIGGEIVKPEQGCQGVISSGSSLYFSKAGKRQLVSW
DLDTSWVDFVQFYIQIGGESASCNKPDSREEGVLLQYSNNGGIQWHLLAEMYFSD

FSKPRFVYLELPAAAKTPCTRFRWWQPVFSGEDYDQWAVDDIILSEKQKQIIPVIN
PTLPQNFYEKPAFDYPMNQMSVWLMLANEGMVKNETFCAATPSAMIFGKSDGDR
FAVTRDLTLKPGYVLQFKLNIGCANQFSSTAPVLLQYSHDAGMSWFLVKEGCYPA
SAGKGCEGNSRELSEPTMYHTGDFEEWTRITVIPRSLASSKTRFRWQESSSQKNV
5 PPFGLDGVYISEPCPSYCSGHGDCISGVCFCDLGYTAAQGTCSVSNVPHNEMFDRF
EGKLSPLWYKITGAQVGTGCGTLNDGKSLYFNPGPKREARTVPLDTRNIRLVQFYI
QIGSKTSGITCIKPRTRNEGLIVQYSNDNGILWHLLRELD FMSFLEPQIISIDLPODAK
TPATAFRWWQPQHGHKHAQWALDDVLIGMNDSSQTGFQDKFDGSIDLQANWYRI
QGGQVDIDCLSMDTALIFTENIGKPRYAETWDFHVSASTFLQFEMSMGCSKPFSNS
10 HSVQLQYSLNNGKDWHLVTEECVPPTIGCLHYTESSITYTSERFQNWKRITVYLPLS
TISPRTRFRWIQANYTVGADSWAIDNVVLASGCPWMCSGRGICDAGRCVCDRGFG
GPYCVPVVPLPSILKDDFNGNLHPDLWPEVYGAERGNLNGETIKSGTSLIFKGEGL
RMLISRDLDCTNTMYVQFSLRFLAKSTPERSHSILLQFSISGGITWHLMDIFYFPQTT
NILFINVPLPYTAQTNATRFRLWQPYNNGKKEEIWIVDDFIIDGNNVNNPVMLLDT
15 FDFGPREDNWWFFYPGGNIGLYCPYSSKGAPEEDSAMVSVSNEVGEHSITTRDLNVN
ENTIIQFEINVGCSTDSSSADPVRLEFSRDFGATWHLLLPLCYHSSSHVSSLCSTEHH
PSSTYYAGTMQGWRRREVHFGKLHLGCSVRFRWYQGFYPAGSQPVTWAIDNVYI
GPQCEEMCNGQGSCINGTKCICDPGYSGPTCKISTKNPDFLKDDEFEGQLES DRFL
MSGGKPSRKCGILSSGNNLFFNEDGLRMLMTRDLDLSHARFVQFFMRLGCGKGVP
20 DPRSQPVLLQYSLNGLLSWSLLQEFLFSNSSNVGRYIALEIPLKARSGSTRLRWWQ
PSENGHFYSPWVIDQILIGGNISGNTVLEDDFTTLD SRKWLLHPGGTKMPVCGSTG
DALVFIEKASTRYVVSTDVAVNEDSFLQIDFAASCSVTDSCYAIELEYSVDLGLSW
HPLVRDCLPTNVECSRYHLQRILVSDTFNKWTRITLPLPPYTRSQATRFRWHQPAP
FDKQQTWAIDNVYIGDGCIDMCSGHGRCIQGNCVCDEQWGGLYCDDPETS LPTQ
25 LKDNFN RAPSSQNWLTVNGGKLSTVCGAVASGMALHFSGGCSRLLVTVDLNLTN
AEFIQFYFMYGCLITPNNRNQGVLL EYSVNGGITWNLLMEIFYDQYSKPGFVNILL
PPDAKEIATRFRWWQPRHDGLDQNDWAIDNVLISGSADQRTVMLDTFSSAPVPQH
ERSPADAGPVGRIAFDMFMEDKTSVNEHWLFHDDCTVERFCDSPDGVMLCGSHD
GREVYAVTHDLTPTEGWIMQFKISVGCKVSEKIAQNQIHVQYSTDFGVSWNYLVP
30 QCLPADPKCSGSVSQPSVFFPTKGWK RITYPLPESLVGNPVRRFRFYQKYS DMQWAI
DNFYLGPGCLDNCRGHGDCLEQCICDPGYSGPNCYLTHTLKTF LKERFDSEEIKP
DLWMSLEGGSTCTECGILAEDTALYFGGSTVRQAVTQDLDLRGAKFLQYWGRIGS

ENNMITSCHRPICRKEGVLLDYSTDGGITWTLLHEMDYQKYISVRHDYILLPEDALT
NTTRLRWQPFVISNGIVVSGVERAQWALDNILIGGAEinPSQLVDTFDDEGTSHE
ENWSFYFNAVRTAGFCGNPSFHLYWPNKKKDKTHNALSSRELIIQPGYMMQFKIV
VGCEATSCGDLHSVMLEYTKDARSDSWQLVQTQCLPSSSNSIGCSPFQFHEATIYN
5 SVNSSSWKRITIQLPDHVSSSATQFRWIKGEETEKQSWAIDHVIYIGEACPKLCSG
HGYCTTGAICICDESFQGDDCSVFSDHLP SYIKDNFESARVTEANWETIQGGVIGSG
CGQLAPYAHGDSL YFNGCQIRQAATKPLDLTRASKIMFVLQIGSMSQTDSCNSDLS
GPHAVDKAVLLQYSVNNGITWHVIAQHQPDKFTQAQRVSYNVPLEARMKGVLLR
WWQPRHNGTGHDQWALDHVEVVLVSTRKQNYMMNFSRQHGLRHFYNRRRRSL
10 RRY P

SEQ ID No:52 (Sortilin-related receptor)

MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGD
RELRLWARGDARGASRADEKPLRRKRS AALQPEPIKVYGVSLNDSHNQMVVH
15 WAGEKSNVIVALARDSLALARPKSSDVVYSYDYGKSFKKISDKLNFGLGNRSEAV
IAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGF SIPFRAADLLLHSKASNLLL
GFDRSHPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYST
VFRSTDFQSRNQEVILEEVRDFQLRDKYMFATKVVHLLGSEQQSSVQLWVSFG
RKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNRTNLYISEA EGLKFSLSLE
20 NVLYYSPGGAGSDTLVRYFANEFPADFHRVEGLQGVIATLINGSMNEENMRSVI
TFDKGGTWEFLQAPAF TGYGEKINCELSQGCSLHLAQRLSQLNLQLRRMPILSKE
SAPGLIATGSVGKNLASKTNVYISSAGARWREALPGPHYTTWGDHGGIITAIAQ
GMETNELKYSTNEGETWKTFIFSEKPVFVYGLL TEPGEKSTVFTIFGSNKENVHSW
LILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGED
25 FDRPVVVSNC SCTR EDECDFGFKMS EDLSLEV CVPDPEFSGKSYSPPVPCPVGST
YRRTRGYRKISGDTCSGGDVEARLEGELVPCPLAEENEFILYAVRKSIYRYDLASG
ATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEVINS GLET
VEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGV
MFWTDWGD LKPGIYRSNMDGSAA YHLVSEDVKWPNGISVDDQWYWTDAYLEC
30 IERITFSGQQRSVILDNLPHPYAJAVFKNEIYWDDWSQLSIFRASKYSGSQMEILAN
QLTGLMDMKIFYK GKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSVLPSG
DLMCDCPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDND CGDMS

DERNCPTTICDLDTQFRCQESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEY
NCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCEASNFCRNGHCIPQRWA
CDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCE
PLCTHFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDE
5 FGFQCQNGVCISLIWKCDGMDDCGDYSEANCENPTEAPNCSRYPQFRCENGHCI
PNRWKCDREND CGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDTW
VCDGYRDCADGSDEEACPLLANTAASTPTQLGRCDRFEFECHQPKTCIPNWKRC
DGHQDCQDGRDEANCPTHSTLT CMSREFQCEDGEACIVLSERCDGFLDCSDESDE
KACSELT VYKVQNLQWTADFSGDVTLTWMRPKKMPSASC VYNVYYRVVGESI
10 WKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDA
PRNLQLSLPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTFI
KNLLVNTLYTVRVAAVTSRGIGNWSDSKSITTIKGVIPPPDIHIDSYGENYLSFTLT
MESDIKVNGYVYNLFWAFDTHKQERRTLNFRGSILSHKVGNLTAHTSYEISAWAK
TDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTA VECTWTGPRNVVYGIFYATSF
15 LDLYRNPKSLTTS LHNKT VIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLP
PRHLHVHTGKTSVVIKWESPYDSPDQDLLYAIAVKDLIRKTDRSYKVKS RNSTV
EYTLNKL EPGGKYHII VQLGNMSKDSSIKITTVSLSAPDALKIITENDHVLLFWKSL
ALKEKHFNESRGYEIHMFD SAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARC
LFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAIL
20 YTKHRRLQSSFTAFANSHYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

SEQ ID No:53 (18 kDa microsomal signal peptidase subunit)

MLSLDFLDDVRRMNKRQLYYQVLNFGMIVSSALMIWKGLMVTGSESPIVVVL SG
SMEPAFHRGDLLFLTNRVEDPIRVGEIVVFRIEGREIPVHRVLKIHEKQNGHIKFLT
25 KGDNNAVDDRGLYKQGQHWLEKKDVVGRARGFVPYIGIVTILMNDYPKFKYAV
LFLGLFVLVHRE

SEQ ID No: 54 (CLGN)

HLPKQQRGGVCLGVKSKWQPKLRTGREKIINMHFQAFWLCLGLLFISINAEFMDD
30 DVETEDFEENSEEIDVNESELSSEIKYKTPQPIGEVYFAETFD SGRLAGWVLSKAKK
DDMDEEISIDGRWEIEELKENQVPGDRGLVLKSRAKHHAISAVLAKPFIFADKPLI
VQYEVNFQDGIDCGGAYIKLLADTDDLILENFYDKTSYIIMFGPDKCGEDYKLHFIF

RHKHPKTGVFEEKHAKPPDVDLKKFFTDRKTHLYTLVMNPDDTFEVLVDQTVVN
KGSLLLEDVVPPIKPPKEIEDPNDKKPEEWDERAKIPDPSAVKPEDWDESEPAQIEDS
SVVKPAGWLDDEPKFIPDPNAEKPDDWNEDTDGEWEAPQILNPACRIGCGEWKPP
MIDNPKYKGVWRPPLVDNPNYQGIWSPRKIPNDYFEDDHPFLLTSFSALGLELWS
5 MTSDIYFDNFICSEKEVADHWAADGWRWKIMIANANKPGVLKQLMAAAEGHP
WLWLIYLVTAGVPIALITSFCWPRKVKKKHKDTEYKKT DICIPQTKGVLEQEEKEE
KAALEKPMDL EEEKKQNDGEMLEKEEESEPEEKSEEEIEIEGQEE SNQSNKSGSED
EMKEADESTGSGDGPIKSVRKRRVRKD

10 SEQ ID No:55 (ECSIT)

MSWVQATLLARGLCRAWGGTCGAALTGTSISQVPRRLPRGLHCSAAAHSSSEQSL
VPSPPEPRQRPTKALVPFEDLFGQAPGGERDKASFLQTVQKFAEHSVRKRGHIDFIY
LALRKMREYGVERDLAVYNQLLNIFPKEVFRPRNIIQRIFVHYPRQCEGIAVLEQ
MENHGVMPNKETEFLLIQIFGRKSYPMKLKVLRLKLWFPRFMNVNPFVPRDLPQD
15 PVELAMFGLRHMEPDLSARVTIYQVPLPKDSTGAADPPQPHIVGIQSPDQQAALAR
HNPARPVFVEGPFSLWLRNKC VYYHILRADLLPPEEREVEETPEEWNLYYPMQLD
LEYVRSGWDNYEFDINEVEEGPVFAMCMAGAHDQATMAKWIQGLQETNPTLAQI
PVVFRLAGSTRELQTSSAGLEEPPLPEDHQEEDDNLQRQQQGQS

20 SEQ ID No:56 (FLJ20342)

MPSASCDTLLDDIEDIVSQEDSKPQDRHFVRKDVVPKVRRRNTQKYLQEEENSPPS
DSTIPGIQKIWIRTWGCSHNNSDGEYMAQQLAAYGYKITENASDADLWLLNSCTV
KNPAEDHFRNSIKKAQEENKKIVLAGCVPQAQPRQDYLKGLSIIGVQQIDRVVEVV
EETIKGHSVRLLGQKKDNGRRLGGARLDLPKIRKNPLIEIISISTGCLNACTYCKTK
25 HARGNLASYPIDELVDRAKQSFQEGVCEIWLTS EDTGAYGRDIGTNLPTLLWKLV
EVIPEGAMLRLGMTNPPYILEHLEEMAKILNHPRVYAFLHIPVQSASDSVLMEMKR
EYCVADFKRVVDLKEKVPGITIATDIICGFPGETDQDFQETVKLVEEYKFPSLFN
QFYPRPGTPAAKMEQVPAQVKKQRTKDLSRVFHSYSPYDHKIGERQQVLVTEESF
DSKFYVAHNQFYEQVLVPKNPAFMGKMVEVDIYESGKHFMKGQPVSDAKVYTPS
30 ISKPLAKGEVSGLT KDFRNGLGNQLSSGSHTSAASQCDSASSRMVLPMPRLHQDC
ALRMSVGLALLGLLFAFFVKVYN

SEQ ID No:57 (KIAA0090)

MAAEWASRFWLWATLLIPAAAVYEDQVGKFDWRQQYVGKVKFASLEFSPGSKK
LVVATEKNVIAALNSRTGEILWRHVDKGTAECAVDAMLLHGQDVITVSNGGRIM
RSWETNIGGLNWEITLDSGSFQALGLVGLQESVRYIAVLKKTTLALHHLSSGHLK
5 WVEHLPESDSIHYQMVSYSYSGSVVWALGVVPFSHVNIIVKFNVEDGEIVQQVRVS
TPWLQHLSGACGVVDEAVLVCPDPSSRSLQTLALETEWELRQIPLQSLDLEFGSGF
QPRVLPTQPNPVDASRAQFFLHLSPSHYALLQYHYGTLSLLKNFPQTALVSFATTG
EKTVAAVMACRNEVQKSSSSEDGSMGSFSEKSSSKDSLACFNQTYTINLYLVETG
RRLDTTTTFSLEQSGTRPERLYIQVFLKKDDSVGYRALVQTEDHLLLFLQQLAGK
10 VVLWSREESLAEVVCLEMVDLPLTGAQAELEGEFGKKADGLLGMFLKRLSSQLIL
LQAWTSHLWKMFDYDARKPRSQIKNEINIDTLARDEFNLQKMMVMVTASGKLFGI
ESSSGTILWKQYLPNVKPDSSFKLMVQRTTAHFPHPPQCTLLVKDKESGMSSLYVF
NPIFGKWSQVAPPVLKRPILQSLLLPVMDQDYAKVLLLIDDEYKVTAFPATRNVL
QLHELAPSIFFYLVD AEQGRLCGYRLRKDLTTELSWELTIPPEVQRIVKVKGKRSSE
15 HVHSQGRVMGDRSVLYKSLNPNLLAVVTESTDAHHERTFIGIFLIDGVTGRIIHSSV
QKKAKGPVHIVHSENWVVYQYWNTKARRNEFTVLELEYEGTEQYNATAFSSSLDRP
QLPQVLQQSYIFPSSISAMEATITERGITSRHLLIGLPSGAILSLPKALLDPRRPEIPTE
QSREENLIPYSPDVQIHAERFINYNQTVSRMRGIYTAPSGLESTCLVVAYGLDIYQT
RVYPSKQFDVLKDDYDYVLISSVLFLGLVFATMITKRLAQVKLLNRAWR

20

SEQ ID No:58 (NICE-3)

MASGSNWLSGVNVVLVMAYGSLVFVLLFIFVKRQIMRFAMKSRRGPHVPVGHNA
PKDLKEEIDIRLSRVQDIKYEPQLLADDDARLLQLETQGNQSCYNLYRMKALDAI
RTSEIPFHSEGRHPRSLMGKNFRSYLLDLRNTSTPFKGVKALIDTLLDGYETARY
25 GTGVFGQNEYLR YQEALSELATAVKARIGSSQRHHQSAAKDLTQSPEVSPTTIQVT
YLPSSQKSKRAKHFLKSFKDNYNTLESTL

SEQ ID No: 59 (CK2B)

MSSSEEVSWISWFCGLRGNEFFCEVDEDYIQDKFNLTGLNEQVPHYRQALDMILD
30 LEPDEELEDNPNQSDLIEQAAEMLYGLIHARYILTNRGIAQMLEKYQQGDFGYCPR
VYCENQPMPLPIGLSDIPGEAMVKLYCPKCMDVYTPKSSRHHHTDGAYFGTGFPH
MLFMVHPEYRPKR PANQFVPRLYGFKIHPMAYQLQLQAASNFKSPVKTIR

SEQ ID No: 60 (PTP LOC114971)

MAATALLEAGLARVLFYPTLLYTLFRGKVPGRAHRDWHYHRIDPTVLLGALPLRSL
TRQLVQDENVRGVITMNEEYETRFLCNSSQEWKRLGVEQLRLSTVDMTGIPTLDN
5 LQKGVQFALKYQSLGQCVYVHCKAGRSRSATMVAAyliQVHKWSPEEAVRAIAK
IRSYHIRPGQLDVLKEFHKQITARATKDGTFVISK

SEQ ID No: 61 (STT3)

MTKFGFLRLSYEKQDTLLKLLLSMAAVLSFSTRLFAVLRFESVIHEFDPYFNYRTT
10 RFLAEEGFYKFHNWFDRAWYPLGRIIGGTTYPGLMITSAAIYHVLHFFHITIDIRN
VCVFLAPLFSSTTTIVTYHLTKELKDAGAGLLAAAMIAVVPGYISRSVAGSYDNEG
IAIFCMLLTYYMWIKAVKTGSICWAAKCALAYFYMVSSWGGYVFLINLIPLHVLV
LMLTGRFSHRIYVAYCTVYCLGTILSMQISFVGFPVLSSEHMAAFGVFGLCQIHA
FVDYLRSKLNPQQFEVLFRSVISLVGVLLTVGALLMLTGKISPWTGRFYSLLDPS
15 YAKNNIPIASVSEHQPTTWSSYYFDLQLLVFMFPVGLYYCFSNLS DARIFIIMYGV
TSMYFSAVMVRLMLVLAPVMCILSGIGVSQVLSTYMKNLDISRPDKKSKKQQDST
YPIKNEVASGMILVMAFFLITYTFHSTWVTSEAYSSPSIVLSARGGDGSRIFDDFRE
AYYWLRHNTPEDAKVMSWWDYGYQITAMANRTILVDNNTWNNTTHISRVGQAM
ASTEELKAYEIMRELDVSYVLVIFGGTLGYSSDDINKFLWMVRIGGSTDTGKHKEN
20 DYYTPTGEFRVDREGSPVLLNCLMYKMCYYRFGQVYTEAKRPPGFDRVRNAEIG
NKDFELDVLEEA YTTEHWLVRIYKVKDLDNRGLSRT

SEQ ID No: 62 (NicAChRa3)

MGSGPLSLPLALSPRLLLLLLLLL SLLPVARASEAEHRLFERLFEDYNEIRPVANVSD
25 PVIHFEVSMSQLVKVDEVNQIMETNLWLKQIWNDYKLKWNPSDYGGAEFMRVP
AQKIWKPDIVLYNNAVGDFQVDDKTKALLKYTGEVTWIPPAIFKSSCKIDVTYFPF
DYQNCTMKFGSWSYDKAKIDLVLIGSSMNLKDYWESGEWAHKAPGYKHDIKYN
CCEEIYPDITYSLYIRRLPLFY TINLIIPCLLISFLT VLVFYLPSCGKVTLCISVLLSL
TVFLLVITETIPSTSLVIPLIGEYLLFTMIFVTL SIVTVFVLNVHYRTPTTHTMPSWV
30 KTVFLNLLPRVMFMTRPTSNEGNAQKPRPLYGAELSNLNCFSRAESKGCKEGYPC
QDGMCGYCHHRIKISNFSANLTRSSSESVDVLSLSALSPEIKEAIQSVKYIAEN
MKAQNEAKEEQKAQEIQQLKRKEKSTETSDQEPGL

SEQ ID No: 63 (SLC4A2)

MSSAPRRPAKGADSFCTPEPESLGPGTGPFPQEEDELHRTLGVVERFEEILQEAGSR
GGEEPGRSYGEEDFEYHRQSSHHHHPLSTHLPPDARRRKTPQGPGRKPRRRPGAS
5 PTGETPTIEEGEEDEDEASEAGARALTQPSVSTPSSVQFFLREDDSDRKAERTS
PSSPAPLPHQEATPRASKGAQAGTQVEEAEEAVAVASGTAGGDDGGASGRPLPK
AQPGRHSYNLQERRRIGSMTGAEQALLPRVPTDEIEAQTLATADLDLMKSHRFED
VPGVRRHLVRKNAKGSTQSGREGREPPTPRARPRAPHKPHEVFVELNELLLDKN
QEPQWRETARWIKFEEDVEEETERWGKPHVASLSFRSLELRRTLAHGAVLLDLD
10 QQTLPGVAHQVVEQMVISDQIKAEDRANVLRALLLKHSHPSDEKDFSFRNISAGS
LGSLLGHHHGQGAESDPHVTEPLMGGVPETRLVERERDVPPPAPPAGITRSKSKH
ELKLEKIPENAEATVVLVGCVEFLSRPTMAFVRLREAVELDAVLEVPVPVRFLFL
LLGPSSANMDYHEIGRSISTLMSDKQFHEAAYLADEREDLLTAINAFLDCSVVLPP
SEVQGEELLRSVAHFQRQMLKKREEQGRLPTGAGLEPKSAQDKALLQMVEAAG
15 AAEDDPLRRTGRPFGGLIRDVRRRYPHYLSDFRDALDPQCLAAVIFTYFAALSPAIT
FGLLGEKTQDLIGVSELMSTALQGVVFCLLGAQPLLVIGFSGPLLVFEEAFFSFCS
SNHLEYLVGRVWIGFWLVFLALLMVALEGSFLVRFVSRFTQEIFAFLISLIFYETFY
KLVKIFQEHLHGCSASNSSEVDGGENMTWAGARPTLGPGRNSLAGQSGQGKPR
GQPNTALLSLVLMAGTFFIAFFLRKFKNRFFPGRIRRVIGDFGVPIAILIMVLVDYS
20 IEDTYTQKLSVPSGFSVTAPEKRGWVINPLGEKSPFPVWMMVASLLPAILVFILIFM
ETQITTLISKKERMLQKGS GFHLDLLLVAMGGICALFGLPWLAATVRSVTHAN
ALTVMSKAVAPGDKPKIQEVKEQRTGLLVALLVGLSIVIGDLLRQIPLAVLFGIFL
YMGVTSLNGIQFYERLHLLLMPPKHHPDVTYVKKVRTLRMHLFTALQLLCLALL
WAVMSTAASLAFPFILITVPLRMVVLTRIFTDREMKCLDANEAEPVFDEREGVDE
25 YNEMPMPV

SEQ ID No: 64 (HIFPH3/EGLN3)

MGKGGNQGEAAREVSVPTFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
GGQRVIGHYAGEDATDAFRAFHPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
30 EDFRALRKTAEDMNLFKTNHVFFLLLLAHIIALESIAWFTVIFYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHVFVLGEWQPIEYGKKKLKYL PYNHQHEYFFLIGPPLLI

PMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYIPFYGILGALLFLNFIRFLESH
WFWVWTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWFSGHLNFQIEHH
LFPTMPRHNHLHKIAPLVKSLCAKHGIEYQEKPLLRALLDIIRSLKKSGKLWLDAYL
HK

5

SEQ ID No:65 (STX10)

MSLEDPPFFVVRGEVQKAVNTARGLYQRWCELLQESAAVGREELDWTNENLNG
RSIEWDLEDLEETIGIVEANPGKFKLPAGDLQERKVFVERMREAVQEMKDHMVSP
TAVAFLENNREILAGKPAAQKSPDLLDASAVSATSRYTEEQQATQQLIMDEQDQ
10 QLEMVSGSIQVLKHMSGRVGEELDEQGIMLDFAQEMDHTQSRMDGVLRLAK
VSHMTSDRRQWCAIAVLVGVLLLVLILLFSL

SEQ ID No:66 (Presenilin-2)

MLTFMADSEEEVCDERTSLMSAESPTPRSCQEGRPEDGENTAQWRSQENEE
15 GEEDPDRYVCSGVPGRPGLLEELTLKYGAHVIMLFVPVTLCMIVVATIKSVRF
YTEKNGQLIYTPFTEDTPSVGQRLNLSVLNTLMISVIVVMTIFLVVLYKYRCYKFI
HGWLMSSLMMLLFLFTYIYLGEVLKTYNVAMDYPTLLLTVWNFGAVGMVCIHWK
GPLVLQQAYLIMISALMALVFIKYLPEWSAWVILGAISVYDLVAVLCPKGPLRML
VETAQERNEPIFPALYSSAMVWTVGMAKLDPSSQGALQLPYDPEMEEDSYDSFG
20 EPSYPEVFEPPLTGYPGEELEEEERGVKLGLGDFIFYSVLVGKAAATGSGDWNTT
LACFVAILIGLCLTLLLLAVFKKALPALPISITFGLIFYFSTDNLVRPFMDTLASHQL
YI

SEQ ID No:67 (Wolframin)

25 MDSNTAPLGPSCPQPPAPQPQARSRLNATASLEQERSERPRAPGPQAGPGPGVRD
AAAPAEPPAQHTRSRRERADGTGPTKGDMEIPFEEVLERAKAGDPKAQTEVGKHY
LQLAGDTDEELNSCTAVDWLVLAQKQRREAVKLLRRCLADRRGITSENEREVR
QLSSETDLERA VRKAALVMYWKLNPKKKKQVAVAELENVGVNEHDGGAQPG
PVPKSLQKQRRMLERLVSSSESKNYIALDDFVEITKKYAKGVIPSSLFLQDDEDDDE
30 LAGKSPEDLPLRLKVVKYPLHAIMEIKEYLIDMASRAGMHWLSTIIPTHHINALIFF
FIISNLTIDFFAFFIPLVIFYLSFISMVICTLKVFQDSKAWENFRTLTDLLLRFEPNLDV
EQAEVNFGWNHLEPYAHFLLSVFFVIFSFIASKDCIPCSELA VITGFFT VTSYLSLS

THAEPYTRRALATEVTAGLLSLLPSMPLNWPYLKVLGQTFITVPVGHLLVVLNVSV
PCLLYVYLLYLFFRMAQLRNFKGTICYLVPYLVCFMWCELSVVILLESTGLGLLR
ASIGYFLFLFALPILVAGLALVGVLQFARWFTSLELTAKIAVTVAVCSVPLLLRWWT
KASFSVVG MVKSLTRSSMVKLILVWLTAIVLFCWFYVYRSEGMKVYNSTLTWQQ
5 YGALCGPRAWKETNMARTQILCSHLEGHRVTWTGRFKYVRVTDIDNSAESAINM
LPFFIGDWMRCLYGEAYPACSPGNTSTAEEELCRLKLLAKHPCHIKKFDRYKFEIT
VGMPFSSGADGSREREEDDVTKDIVLRASSEFKSVLLSLRQGS LIEFSTILEGRLGSK
WPVFELKAISCLNCMAQLSPTRRHVKIEHDWRSTVHGAVKFAFDFFFFPFLSAA

10 SEQ ID No:68 (BACE1)

MAQALPWLLLWMGAGVLP AHGTQH GIRLPLRSGLGGA PLGLRLPRETDEEPEEPG
RRGSFVEMVDNLRGKSGQGYVEMTVGSPPQTLN ILVDTGSSNFAVGAAPHPFLH
RYYQRQLSSTYRDLRKGVYVPYTQGWEGELGTDLV SIPHGPNVTVRANIAAITE
SDKFFINGSN WEGILGLAYAEIARPDDSL EPPFDSL VKQTHVPNLFSLQLCGAGFPL
15 NQSEVLASVGGSMIIGGIDHS LYTGSLWYTPIRREWYVEVIIVRVEINGQDLKMDC
KEYNYDKSIVDSGTTNLR LPKKVFEAAVKS IKAASSTEKFPDGFWLGEQLVCWQA
GTPPWNI FVISLYLMGEVTNQSF RITILPQQYL RPVEDVATSQDDCYKFAISQSST
GTVMGAVIMEGFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCG
YNIPQTDESTLMTIAYVMAAICALFMLPLCLMVCQWRCLRLRQQHDDFADDISL
20 LK

SEQ ID No:69 (FLJ30668)

MELHYLAKKSNQADLCDARDWSSRGLPGDQADTAATRAALCCQKQCASTPRAT
EMEGSKLSSSPASPSSSLQNSTLQPD AFPPGLLHSGNNQITAERKVCNCCSQELET
25 FTYVDKNINLEQRNRSSPSAKGHNHGELGWENPNEWSQEAAISLISEEEDDTSS
ATSSGKSIDYGFISAILFLVTGILLVIISYTVPREVTVPNTVAAREMERLEKESARLG
AHLDRCVIAGLCLLTLGGVILSCLLMMSMWKGELYRRNRFASSKESAKLYGSFNF
RMKTSTNENTLELSLVEEDALAVQS

30 SEQ ID No:70 (BSCv protein)

MSEADGLRQRRPLRPQVVTDDD GQAPEAKDGSSFSGRVFRVTFMLAVSLTVPLL
GAMMLLES PIDPQPLSFKEPPLLGV LHPNTKLRQAERLFENQLVGPESIAHIGDVM

FTGTADGRVVKLENGEIEIARFGSGPCKTRDDEPVCGRPLGIRAGPNGTLFVADA
YKGLFEVNPWKREVKLLLSSETPIEGKNMSFVNDLTVTQDGRKIYFTDSSSKWQR
RDYLLLVMEGTDDGRLLLEYDTVTREVKVLLDQLRFPNGVQLSPAEDFVLVAETT
MARIRRVYVSGLMKGGADLFVENMPGFDPNIRPSSSGGYWVGMSTIRPNPGFSML
5 DFLSERPWIKRMIFKLFSQETVMKFVPRYSLVLELSDSGAFRRSLHDPDGLVATYIS
EVHEHDGHLYLGSFRSPFLCRLSLQAV

SEQ ID No:71 (FLJ39249)

MAPRPLGPLVLALGGAAAVLGSVLFILWKTYFGRGRERRWDRGEAWWGAEAAAR
10 LPEWDEWDPEDEEDEEPALEEELEQREVLVLGLDGAGKSTFLRVLSGKPPLEGHIPT
WGFNSVRLPTKDFEVDLLEIGGSQNLRFYWKEFVSEVDVLVFVVDSDADRLRLPWA
RQELHKLLDKDPDLPVVVVANKQDLSEAMSMGELQRELGLQAIDNQREVFLAA
SIAPAGPTFEETPGTVHIWKLLLELLS

15 SEQ ID No:72 (Cgl-13)

MSFLIDSSIMITSQILFFGFGWLFFMRQLFKDYEIRQYVVQVIFSVTFAFSCTMFELII
FEILGVLNSSSRYPFWKMNLCVILLILVFMVPFYIGYFIVSNIRLLHKQRLLFSCLLW
LTFMYFFWKLGDPPILSPKHGILSIEQLISRVGIVGVTLMALLSGFGAVNCPYTYM
SYFLRNVTDTDILALERRLLQTMDMISSKKKRMAMARRTMFQKGEVHNKPSGFW
20 GMIKSVTTSASGSENLTLIQQEVDALIELSRQLFLETADLYATKERIEYSKTFKGKY
FNFLGYFFSIYCVWKIFMATINIVFDRVGKTDVPVTRGIEITVNYLGIQFDVKFWSQHI
SFILVGHIIVTSIRGLLITLTKFFYAISSSKSSNVIVLLLAQIMGMYFVSSVLLIRMSMP
LEYRTITEVLGELQFNFYHRWFDVIFLVSALSSILFLYLAHKQAPEKQMAP

25 SEQ ID No:73 (ITCH)

MSDSGSQLGSMGSLTMKSQIQITVISAKLKENKKNWFGPSPYVEVTVDGQSKKTE
KCNNTNSPKWKQPLTVIVTPVSKLHFRVWSHQTLKSDVLLGTAALDIYETLKSNN
MKLEEVVVTLQLGGDKETETIGDLSICLDGLQLESEVVTNGETTCSENGVSCLP
RLECNSAISAHCNLCPLGLSDSPISASRVAGFTGASQNDGSRSKDETRVSTNGSD
30 DPEDAGAGENRRVSGNNSPSLSNGGFKPSRPPRPSRPPPTPRRPASVNGSPSATSE
SDGSSTGSLPPTNTNTNTSEGATSGLIPLTISGGSGPRPLNPVTQAPLPPGWEQRVD
QHGRVYYVDHVEKRTTWDRPEPLPPGWERRVDNMGRIYYVDHFTRTTTWQRPT

LESVRNYEQWQLQRSQLQGAMQQFNQRFTYGNQDLFATSQSKEFDPLGPLPPGWE
KRTDSNGRVYFVNHNTRITQWEDPRSQGQLNEKPLPEGWEMRFTVDGIPYFVDH
NRRTTTYIDPRTGKSALDNGPQIA YVRDFKAKVQYFRFWCQQLAMPQHIIKITVTR
KTLFEDSFQQIMSFSPQDLRRRLWVIFPGEEGLDYGGVAREWFFLLSHEVLNPMYC
5 LFEYAGKDNYCLQINPASYINPDHLKYFRFIGRFIAMALFHGKFIDTGFSLPFYKRIL
NKPVGKLDLESIDPEFYNSLIWVKENNIEECDLEMYFSVDKEILGEIKSHDLKPNGG
NILVTEENKEEYIRMVAEWRLSRGVVEEQTAFFEGFNEILPQQYLQYFDAKELEVL
LCGMQEIDLNDWQRHAIYRHYARTSKQIMWFWQFVKEIDNEKRMRLQLQFVTGTC
RLPVGGFADLMGSNGPQKFCIEKVGKENWLPRSHTCFNRLDLPPYKS YEQLKEKL
10 LFAIETEFGFQE

SEQ ID No:74 (Casein kinase III beta chain)

MSSSEEVSWISWFCGLRGNEFFCEVDEDDYIQDKFNLTGLNEQVPHYRQALDMILD
LEPDEELEDNPNQSDLIEQAAEMLYGLIHARYILTNRGIAQMLEKYQQGDFGYCPR
15 VYCENQPMPLPIGLSDIPGEAMVKLYCPKCMDVYTPKSSRHHHTDGA YFGTGFPH
MLFMVHPEYRPKRPANQFVPRLYGFKIHPMAYQLQLQAASNFKSPVKTIR

SEQ ID No:75 (Cathepsin B)

MWQLWASLCCLLVLANARSRPSFHPVSDLVNYVNKRNTTWQAGHNFYNVDMS
20 YLKRLCGTFLGGPKPPQRMFTEDLKLPA SFDAREQWPQCPTIKEIRDQGSCGSCW
AFGAVEAISDRICHTNAHVSVEVSAEDLLTCCGSMCGDGCNGGYPAEAWNFWTR
KGLVSGGLYESHVGC RPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYK
QDKHYGYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEM
MGGHAIRILGWGVENGTPYWL VANSWNTDWGDNGFFKILRGQDHC GIESEVVAG
25 IPRTDQYWEKI

SEQ ID No:76 (Delta-6 fatty acid desaturase)

MGKGGNQGE GAAEREVSVP TFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
GGQRVIGHYAGEDATDAFRAFH PDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
30 EDFRALRKTAEDMNLFKTNHVFFLLLLAHIIALESIAWFTV FYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHV FVLGEWQPIEYGKKKLKYL PYNHQHEYFFLIGPPLLI

PMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYIPFYGILGALLFLNFIRFLESH
WFVWVTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFNDWFSGHLNFQIEHH
LFPTMPRHNHLHKIAPLVKSLCAKHGIEYQEKPLLRALLDIIRSLKKSGKLWLDAYL
HK

5

SEQ ID No:77 (Nogo-A)

MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEEEDEDEDLEELEVLER
KPAAGLSAAPVPTAPAAGAPLMDFGNDVPPAPRGPLPAAPPVAPERQPSWDPS
VSSTVPAPSPLSAAAVSPSKLPEDDEPPARPPPPPPASVSPQAEPVWTPAPAPAAPP
10 STPAAPKRRGSSGSVDETLFALPAASEPVIRSSAENMDLKEQPGNTISAGQEDFPSV
LLETAASLPSLSPLSAAAFKEHEYLGNLSTVLPTEGTLQENVSEASKEVSEKAKTLL
IDRDLTEFSELEYSEMGSFSVSPKAESA VIVANPREEIIVKNKDEEEKLVSNILHN
QQELPTALTKLVKEDEVVSSEKAKDSFNEKRVA VEAPMREEYADFKPFERVWEV
KDSKEDSDMLAAGGKIESNLESKVDDKKCFADSLEQTNHEKDSSESNDDTSFPSTPE
15 GIKDRSGAYITCAPFNPAATESIATNIFLLGDPTSSENKTDEKKIEEKKAQIVTEKNT
STKTSNPFLVAAQDSETDYVTTDNLTKVTEEVVANMPEGLTPDLVQEACESELNE
VTGT KIA YETKMDLVQTSEVMQESLYPAAQLCPSFEESEATPSPVLPDIVMEAPLN
SAVPSAGASVIQPS SSPLEASSVNYESIKHEPENPPP YEEAMS VSLKKVSGIKEEIKE
PENINAALQETEAPYISIACDLIKETKLSAEPAPDFSDYSEMAKVEQVPDHSELVE
20 DSSPDSEPVDLFSDD SIPDVPQKQDET VMLVKESLTETSFESMIEYENKEKLSALPP
EGGKPYLESFKLSLDNTKDTLLPDEVSTLSKKEKIPLQMEELSTAVYSNDDL FISKE
AQIRETETFS DSSPIEIDEFPTLISSKTDSFSKLAREYTDLEVSHKSEIANAPDGAGSL
PCTELPHDLSLKNIQPKVEEKISFSDDFSKNGSATSKVLLLPPDV SALATQAEIESIV
KPKVLVKEAEKKLPSDTEKEDRSPSAIFSAELSKTSVVDLLYWRDIKKTGVVFGAS
25 LFLLLSLTVFSIVSVTA YIALALLSVTISFRIYKGVIAIQKSDEGHPFRAYLESEVAI
SEELVQKYSNSALGHVNCTIKELRRLFLVDDLVDLSLKFAVLMWVFTYVGALFNGL
TLLILALISLFSVPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

SEQ ID No:78 (PDGFRB)

30 MRLPGAMPALALKGELL LLSL LLLLEPQISQGLVVTTPGP ELVLNV SSTFVLTCSGS
APVVWERMSQEPPQEMAKAQDGTFFSVLTLTNLTGLDTGEYFCTHNSRGLETDE
RKRLYIFVPDPTVGFLPNDAEELFIFLTEITEITIPCRVTD PQLVVTLHEKKGDVALP

VPYDHQRGFSGIFEDRSYICKTTIGDREVDSDAYYVYRLQVSSINVSNAVQTVVR
QGENITLMCIVIGNEVVNFEWTYPRKESGRLVEPVTDFLLDMPYHIRSILHPSAELE
DSGTYTCNVTESVNDHQDEKAINITVVESGYVRLLGEVGTQLQFAELHRSRTLQVV
FEAYPPPTVLWFKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGHYT
5 MRAFHEDAENVQLSFQLQINVPVRVLELSESHPDSGEQTVRCRGRGMPQPNIWSAC
RDLKRCPRELPPTLLGNSSEEEESQLETNVTYWEEEQEFVVSTLRLQHVDRLSVR
CTLRNAVGOQTQEVIVVPHSLPFKVVISAILALVVLTIISLILMLWQKKPRYEIR
WKVIESVSSDGHEYTYVDPMLQPYDSTWELPRDQLVLGRTLGSAGFGQVVEATAH
GLSHSQATMKVAVKMLKSTARSSSEKQALMSELKIMSHLGPLNVNLLGACTKG
10 GPIYITEYCRYGDLVDYLHRNKHTFLQHHSKRRPPSAELYSNALPVGPLPSHVS
LTGESDGGYMDMSKDESVDYVPMMLDMKGDVKYADIESSNYMAPYDNYVPSAPE
RTCRATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICEGKL
VKICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILLWEI
FTLGGTPYPELPMNEQFYNAIKRGYRMAQPAHASDEIYEIMQKCWEEKFEIRPPFS
15 QLVLLERLLGEGYKKKYQQVDEEFLRSDHPAILRSQARLPGFHGLRSPLDTSSVL
YTAVQPNEGDNDYIPLDPKPEVADEGPLGSPSLASSTLNEVNTSSTISCDSPLEP
QDEPEPEPQLELQVEPEPELEQLPDSGCPAPRAEAEDSFL

SEQ ID No:79 (ENSG00000144840)

20 MASLDRVKVLVLGDSGVGKSSLVHLLCQNQVLGNPSWTVGCSVDVRVHDYKEG
TPEEKTCTYIELWDVGGSVGSASSVKSTRAVFYNSVNGIIFVHDLTNKKSSQNLRRW
SLEALNRDLVPTGVLVTNGDYDQEQFADNQIPLLVIGTKLDQIHETKRHEVLTSTA
FLAEDFNPEEINLDCTNPRYLAAGSSNAVKLSRFFDKVIEKRYFLREGNQIPGFPDR
KRFGAGTLKSLHYD

25

SEQ ID No:80 (PTK7)

MGAARGSPARPRRLPLLSVLLLPLLGGTQTAIVFIKQPSSQDALQGRRALLRCEVE
APGPVHVYWLDDGAPVQDTERRFAQGSSLSFAAVDPLQDSGTFQCVARDDVTGE
EARSANASFNIKWIEAGPVVLKHPASEAEIQPQTQVKLRCHIDGHPRPTYQWFRDG
30 TPLSDGQSNHTVSSKERNLTLRPAGPEHSGLYSCCAHSAFSQACSSQNFTLSIADES
FARVVLAPQDVVVARYEEMFHCQFSAQPPPSLQWLFEDETPITNRSRPPHLRRAT
VFANGSLLLQVRPRNAGIYRCIGQGQRGPPILEATLHLAEIEDMPLFEPRVFTAGS

EERVTCCLPPKGLPEPSVWWEHAGVRLPTHGRVYQKGHELVLANIAESDAGVYTC
HAANLAGQRRQDVNITVATVPSWLKKPQDSQLEEGKPGYLDCLTQATPKPTVVW
YRNQMLISEDSTRFEVFKNGTLRINSVEVYDGTWYRCMSSTPAGSIEAQAVLQVLE
KLKFTPPPQPQQCMGFDKEATVPCSATGREKPTIKWERADGSSLPEWVTDNAGTL
5 HFARVTRDDAGNYTCLASNGPQGQIRAHVQLTVAVFITFKVEPERTTVYQGHTAL
LQCEAQGDPKPLIQWKGKDRILDPTKLGPRMHIFQNGSLVIHDVAPEDSGRYTCIA
GNSCNIKHTEAPLYVVDKPVPEESEGGSPPPYKMIQTIGLSVGAAYIIVLGLM
FYCKKRCKAKRLQKQPEGEPEMECLNGGPLQNGQPSAEIQEEVALTSLGSGPAA
TNKRHSTSDKMHFPRSSLQPITTLGKSEFGEVFLAKAQGLEEGVAETLVLVKSLQS
10 KDEQQQLDFRRELEMFGKLNHANVVRLLGLCREAEPHYMVLEYVDLEDLKQFLR
ISKSKDEKLKSQPLSTKQKVALCTQVALGMEHLSNNRFVHKDLAARNCLVSAQR
QVKVSALGLSKDVYNSEYYHFRQAWVALRWMSPEAILEGDFSTKSDVWASGVL
MWEVFTHGEMPHGGQADDEVLADLQAGKARLPQPEGCPSKLYRLMQRCWALSP
KDRPSFSEIASALGDSTVDSKP

15

SEQ ID No:81 (FLJ13977)

MRRLTRRLVLPVFGVLWITVLLFFWVTKRKLEVPTGPEVQTPKPSDADWDDLWD
QFDERRYLNAKKWRVGDDPYKLYAFNQRESERISSNRAIPDTRHLSVLNRTPTHLI
REIILVDDFSNDPDDCKQLIKLPVKCLRNNERQGLVRSRIRGADIAQGTTLTFLDS
20 HCEVNRDWLQPLLHRVKEDYTRVVCVIDIINLDTFTYIESASELRGGFDWSLHFQ
WEQLSPEQKARRLDPTPIRTPIIAGGLFVIDKAWFDYLGKYDMDMDIWGGENFEI
SFRVWMCGGSLEIVPCSRVGHVFRKKHPYVFPDGNANTYIKNTKRTAEVWMDEY
KRYYYAARPFALERPFGNVESRLDLRKNLRCQSFKWYLENTYPELSIPKESSIQKGN
IRQRQKCLESQANGTTGSSGQRPAGGTSEIWVQKPRVRNRRHAAPQGFDPGAKPS
25 QHWRRPEHPAAE

SEQ ID No:82 (FLJ20481)

MFFSMGFIVAVKKGKIASPLEAPVFVAAPHSTFFDGLACVVAGLPSMVSRNENAQVP
LIGRLLRAVQPVLVSRVDPDSRKNTINEIKRTTSGGEWPQILVFPEGTCTNRSLIT
30 FKPGAFIPGVPVQPVLLRYPNKLDTVTWQGYTFIQLCMLTFCQLFTKVEVEFM
PVQVPNDEEKNDPVLFAKVRNLMAEALGIPVTDHTYEDCRLMISAGQLTLPMEA
GLVEFTKISRKLKLDWDGVRKHLDEYASIASSSKGGRIIEEFAKYLKLPVSDVLR

QLFALFDRNHDGSIDFREYVIGLAVLCNPSNTEEHQVAFKLFDVDEDGYTTEEEFST
ILQASLGVPDLDVDSGLFKELAQGDSISYEFEKSFALKHPEYAKIFTTYLDLQTCNVFS
LPKEVQTTTPSTASNKVSPEKHEESTSDKKDD

5 SEQ ID No:83 (SERPINA1)

MPSSVSWGILLLAGLCCCLVPVSLAEDPQGDAQAQKTDTSHTDQDHPTFNKITPNLA
EFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKADTHDEILEGLNFNLTETPE
AQIHEGFQELLRTLNPQDSQLQLTTGNGLFLSEGLKLVDFLEDVKKLYHSEAFV
NFGDTEEAQKQINDYVEKGTQGGKIVDLVKELDRDTVFALVNYIFFKGKWERPFEV
10 KDTEEDDFHVDQVTTVKVPMKRLGMFNIQHCKKLSSWVLLMKYLGNAITAIFFL
PDEGKLQHLENELTHDITKFLNEDRRSASLHLPKLSITGTYDLKSVLGQLGITKV
FSNGADLSGVTEEAPLKLSKAVHKA VLTIDEKGTEAAGAMFLEAIPMSIPPEVKFN
KPFVFLMIEQNTKSPLFMGKVVNPTQK

15 SEQ ID No:84 (FLJ22390)

MRPRRPHQIADLFRPKDQIAYS DTSFPLILSEASLADLNSRLEKKVKATNFRPNIVIS
GCDVYAEDSWDELLIGDVELKRVMACSRCILTTVDPDTGVMSRKEPLETLKSYRQ
CDPSERKLYGKSPLFGQYFVLENPGTIKVGDPVYLLGQ

20 SEQ ID No:85 (SIM TO Y71H10A. 2.P.)

MVSIPEYYEGKNVLLTGATGFLGKVLLEKLLRSCPKNVSVYVLRQKAGQTPQER
VEEVLSGKLFDRLRDENPDFREKIIAINSELTQPKLALSEEDKEVIIDSTNIIFHCAAT
VRFNENLRDAVQLNVIATRQLILLAQQMKNLVFMHVSTAYAYCNRKHIDEVVY
PPPVDPKKLIDSLEWMDDGLVNDITPKLIGDRPNTYITKALAEYVVQQEGAKLN
25 VAIVRPSIVGASWKEPFGWIDNFNGPSGLFIAAGKGILRTIRASNNALADLVPVDV
VVNMSLAAAWYSGVNRPRNIMVYNCTTGSTNPFHWGEVEYHVISTFKRNPLEQA
FRPNVNLTSNHLLYHYWIAVSHKAPAFLYDIYLRMTGRSPRCPSFKFNSNSLSHH
YRKGVSHRVSALLLDCTHVDRSETATFNIDVRQLHWA EYIENYCLGTKKYVLNEE
MSGLPAARKHLNKTFLSLFHTALCHGKLT FVDDTFGFPCLLASGGPLLSVSLHFS
30 YVYSQIHLAFILRDLGSHSAPSLASLAGPRELTVGSLLDREWRQIKTDDFELGKSAG
EVDLEGADIEGCLLATSPAVRQQALLQRGVQWYISIPTTQETVAMEMQI

SEQ ID No:86 (Hypothetical protein tyrosine phosphatase ensg00000149185)

MAATALLEAGLARVLFYPTLLYTLFRGKVPGRAHRDWYHRIDPTVLLGALPLRSL
TRQLVQDENVRGVITMNEEYETRFLCNSSQEWKRLGVEQLRLSTVDMTGIPTLDN
LQKGVQFALKYQSLGQCVYVHCKAGRSRSATMVAAyliQVHKWSPEEAVRAIAK
5 IRSYHIRPGQLDVLKEFHKQITARATKDGTFVISK

SEQ ID No:87 (ICAM-2)

MSSFGYRTLTVLFTLICCPGSDEKVFEVHVRPKKLAVEPKGSLEVNCSTTCNQPE
VGGLETSLNKILLDEQAQWKHYLVSNISHDTVLQCHFTCSGKQESMNSNVSVYQP
10 PRQVILTLQPTLVAVGKSFTIECRVPTVEPLDSLTLFLFRGNETLHYETFGKAAPAP
QEATATFNSTADREDGHRNFSCLA VLDLMSRGGNIFHKHSAPKMLEIYEPVSDSQ
MVIIVTVVSVLLSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP

SEQ ID No:88 (KIAA1181)

15 ASGEWRVSGGRPAGAGRPEEALAAGSDPRGAAARLACSAPTPGGGTMPFDFFRRF
DIYRKVPKDLTQPTYTGAIISICCLFILFLFLSELTGFITTEVVNELYVDDPDKDSGG
KIDVSLNISLPNLHCELVGLDIQDEMGRHEVGHIDNSMKIPLNNGAGCRFEGQFSIN
KVPGNFHVSTHSATAQPQNPDMTTHVIHKLSFGDTLQVQNIHGAFNALGGADRLTS
NPLASHDYILKIVPTVYEDKSGKQRYSYQYTVANKEYVAYSHTGRIIPAIWFRYDL
20 SPITVKYTERRQPLYRFITTICAIIGGTFTVAGILDSCIFTASEAWKKIQLGKMH

SEQ ID No:89 (KIAA1533)

NSKKMQSWYSMLSPTYKQRNEDFRKLFSKLPEAERLIVDYSCALQREILLQGRLY
LSENWICFYSNIFRWETTISIQLKEVTCLKKEKTAKLIPNAIQICTESEKHFFTSFGAR
25 DRCFLILFRLWQNALLEKTLSPRELWHLVHQCYGSELGLTSEDEDYVSPLQLNGL
GTPKEVGDVIALSDITSSGAADRSQEPSVGSRRGHVTPNLSRASSDADHGAEEDK
EEQVDSQPDASSSQTVTPVAEPPSTEPTQPDGPTTLGPLDLLPSEELLTDTSNSSSST
GEEADLAALLPDLSGRLLINSVFHVGAERLQQMLFSDSPFLQGFLQCKFTDVTLS
PWSGDSKCHQRRVLTYTIPISNPLGPKSASVVETQTLFRRGPQAGGCVDSEVLTLQ
30 GIPYQDYFYTAHRYCILGLARNKARLRVSSEIRYRKQPWSLVKSLIEKNSWSGIED
YFHHLERELAKAEKLSLEEGGKDARGLLSGLRRRKRP LSWRAHGDGPQHDPDPDC
ARAGIHTSGSLSSRFSEPSVDQGPAGIPSALVLISIVSLILIALNVLLFYRLWSLERT

AHTFESWHSALAKGKFPQTATEWAEILALQKQFHSVEVHKWRQILRASVELLDE
MKFSLEKLHQGITVSDPPFDTQPRPDDSFS

SEQ ID No:90 (kinectin 1 (kinesin receptor))

5 MEFYESAYFIVLIPSIVITVIFLFFWLFMKETLYDEV LAKQKREQKLIPTKTDKKKAE
KKKNKKKEIQNGNLHESDSES VPRDFKLS DALAVEDDQVAPVPLNVVETSSSVRE
RKKKEKKQKPVLEE QVIKESDASKIPGKKVEPVVTKQPTPPSEAAASKKKPGQK
KSKNGSDDQDKKVETLMVPSKRQEALPLHQETKQESGSGKKASSKKQKTENVFV
DEPLIHATTYIPLMDNADSSPVVDKREVIDLLKPDQVEGIQKSGTKKLKTETDKEN
10 AEVKFKDFLLSLKTMMFSEDEALCVVDLLKEKSGVIQDALKKSSKGELTTLIHQLQ
EKDKLLAAVKEDAAATKDRCKQLTQEMMTEKERSNVVMTRMKDRIGTLEKEHN
VFQNKIHVS YQETQQMQMKFQQVREQMEAEIAHLKQENGILRDAVSNTTNQLES
KQSAELNKL RQDYARLVNELTEKTGKLQQEEVQKKNAEQAATQLKVQLQEAERR
WEEVQSYIRKRTAEHEAAQQDLQSKFVAKENEVQSLHSLTDTLVSKQQLEQRL
15 MQLMESEQKRVNKEESLQMQVQDILEQNEALKAQIQQFHSQIAAQTASVLAEEEL
HKVIAEKDKQIKQTEDSLASERDRLTSKEEELKDIQNMNFLKAEVQKLQALANE
QAAAAHELEKMQQS VYVKDDKIRLLEEQLQHEISNKMEEFKILNDQNKALKSEVQ
KLQTLVSEQPNKD VVEQMEKCIQEKDEKLKTVEELLE TGLIQVATKEEELNAIRTE
NSSLTKEVQDLKAKQNDQVSFASLVEELKKVIHEKDGKIKSVEELLEAELLKVAN
20 KEKTVQDLKQEIKALKEEIGNVQLEKAQQLSITSKVQELQNLLKGKEEQMNTMKA
VLEEKEKDLANTGKWLQDLQEENESLKAHVQEV AQHNLKEASSASQFEELEIVLK
EKGNELKRLEAMLKERESDLSSKTQLLQDVQDENKLFKSQIEQLKQQNYQQASSF
PPHEELLKVISEREKEISGLWNELDSLKDAVEHQ RKKNNDLREKNWEAMEALAST
EKMLQDKVNKTSKERQQQVEAVELEAKEVLKCLFPKVSVP SNLSYGEWLHGFEK
25 KAKECMAGTSGSEEVKVLEHKLKEADEMHTLLQLECEKYKSVLAETEGILQKLQ
RSVEQEENKWKVKVDESHKTIKMQSSFTSSEQELERLRSENKD IENLRREHLE
MELEKAEMERSTYVTEVRELKDLLTELQKKLDDSYSEAVRQNEELNLLKAQLNET
LTKLRTEQNERQKVAGDLHKAQQSLELIQSKIVKAAGD TTVIENSDVSPETESSEK
ETMSVSLNQTVTQLQQLLQAVNQQLTKEKEHYQVLE

30

SEQ ID No:91 (Mesenchymal stem cell protein DSCD75)

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRV
LPSDLDLLLHMNNARYLREADFARVAHLTRCGVLGALRELRAHTVLAASCARHR
RSLRLLEPFVTRRLGWDDRAFYLEARFVSLRDGFVCALLRFRQHLLGTSPERVV
QHLCQRRVEPPELPADLQHWISYNEASSQLLRMESGLSDVTKDQ

5

SEQ ID No:92 (Neurotrypsin)

MTLARFVLALMLGALPEVVGFDSVLNDSLHSHRHSPPAGPHYPYLPTQQRPPT
TRPPPPLPRFPRPPRALPAQRPHALQAGHTPRPHPWGPCPAGEPWVSVTDFGAPCLR
WAEVPPFLERSPPASWAQLRGQRHNFCSRSPDGAGRPWCFYGDARGKVDWGYCD
10 CRHGSVRLRGGKNEFEGTVEVYASGVWGTVCSSHWDDSDASVICHQLQLGGKGI
AKQTPFSGGLIPIYWSNVRCRGDEENILLCEKDIWQGGVCPQKMAAAVTCFSH
GPTFPRIIRLAGGSSVHEGRVELYHAGQWGTVCDDQWDDADAEVICRQLGLSGIAK
AWHQAYFGEGSGPVMLDEVRCTGNELSIQCPSWGEHNCGHKEDAGVSCTPL
TDGVIRLAGGKGSHEGRLEVYYRGQWGTVCDDGWTELNTYVVCRLGFKYQKQ
15 ASANHFEESTGPIWLDDVSCSGKETRFLQCSRRQWGRHDCSHREDVSIACYPGGE
GHRLSLGFPVRLMDGENKKEGRVEVFINGQWGTICDDGWTDKDAAVICRQLGYK
GPARARTMAYFGEGKGPIHVDNVKCTGNERSLADCIKQDIGRHNCRHSEDAGVIC
DYFGKKASGNSNKESSLSSVCGRLRLHRRQKRIIGGKNSLRGGWPWQVSLRLKSSH
GDGRLLCGATLLSSCWVLTAAHCFKRYGNSTRSYAVRVGDYHTLVPEEFEEEEIGV
20 QQIVIHREYRPDRSDYDIALVRLQGPEEQCARFSSHVLPACLPLWRERPQKTASNC
YITGWGDTGRAYSRTLQQAIPLLPKRFCEERYKGRFTGRMLCAGNLHEHKRVDS
CQGDSGGPLMCERPGESWVVYGVTSWGYGCGVKDSPGVYTKVSAFVPWIKSVT
KL

25 SEQ ID No:93 (PP1, regulatory subunit 15B)

MEPGTGGSRKRLGPRAGFRFWPPFFPRRSQAGSSKFPTPLGPENSGNPTLLSSAQPE
TRVSYWTKLLSQLLAPLPGLLQKVLWSQLFGGMFPTRWLDFAGVYSALRALKGR
EKPAAPTAQKSLSSLQLDSSDPSVTSPLDWLEEGIHWQYSPPDLKLELKAKGSALD
PAAQAFLEQQLWGVLELLPSSLQSRLYSNRELSSPSGPLNIQRIDDFSVSYLLNP
30 SYLDCFPRLVSYQNSDGNSEVVGFQTLTPESSCLREDHCHPQPLSAELIPASWQG
CPPLSTEGLP EIHHLRMKRLEFLQQASKGQDLPTPDQDNGYHSLEEEHSLLRMDPK
HCRDNPTQFVPAAGDIPGNTQESTEEKIELLTTEVPLALEEESPSEGCPSPSEIPMEKE

PGEGRISVVDYSYLEGDLPIARPACSNKLIDYILGGASSDLETSSDPEGEDWDEEA
EDDGFDSDSSLSDSLEQDPEGLHLWNSFCSVDPYNPQNFTATIQTAAARIVPEEPSD
SEKDLSGKSDLENSSSQSGSLPETPEHSSGEEDDWESSADEAESLKLWNSFCNSDDP
YNPLNFKAPFQTSGENEKGCRDSKTPSESIVAISECHTLLSCKVQLLGSQESECPDS
5 VQRDVLSGGRHHTHVKKRKVTFLEEVTEYYISGDEDRKGPWEEFARDGCRFQKRIQ
ETEDAIGYCLTFEHRERMFNRLQGTCTFKGLNVLKQC

SEQ ID No:94 (Protein amplified in osteosarcoma (OS-9))

MAAETLLSLLGLLLLGLLLPA SLTGGVGS LNLEELSEMRYGIEILPLPVMGGQSQS
10 SDVVIVSSSKYKQRYECRLPAGAIHFQREREEETPAYQGP GIPPELLSPMRDAPCLLKT
KDWWTYEFCYGRHIQQYHMEDESEIKGEVLYLGYYSQAFDWDDetakaskQHRL
KRYHSQTYGNGSKCDLNGRPREAEVRFLCDEGAGISGDYIDRVDEPLSCSYVLTIR
TPRLCPHPLL RPPPSAAPQAILCHPSLQPEEYMA YVQRQADSKQYGDKIIEELQDLG
PQVWSETKSGVAPQKMAGASPTKDDSKDSDFWKMLNEPEDQAPGGEEVPAEEQ
15 DPSPEAADSASGAPNDFQNNVQVKVIRSPADLIRFIEELKGGTKKGKPNIGQE QPV
DDAAEVPQREPEKERGDPERQREMEEEEEDEDEDEDEDERQLLGEFEKELEGILL
PSDRDRLRSEVKAGMEREL ENIIQETEKELDPDGLKKESERDRAMLALTSTLNKLI
KRLEEKQSPELVKKHKKKR VVPKKPPSPQPT EEDPEHRVRVRVTKLRLGGPNQD
LTVLEMKREN PQLKQIEGLVKELLERGLTAAGKIEIKIVRPWAEGTEEGARWLTD
20 EDTRNLKEIFFNILVPGAEEAQKERQRQKELESNYRRVWGSPGGEGTGDLDEFDF

SEQ ID No:95 (Protein similar to stromal cell-derived factor 2)

MAVVPLLLLGLLWSAVGASSLG VVTCGSVVKLLNTRHNVRLHSHDVRYGSGSGQ
QSVTGVT SVDDSN SYWRIRGKSATVCERGTPIKCGQPIRLTHVNTGRNLHSHHFTS
25 PLSGNQEVS AFGEEGEGDY LDDWTVLCNGPYWVRDGEVRFKHSSTEVL LSVTGE
QYGRPISGQKEVHGMAQPSQNNYWKAMEGIFMKPSELLKAEAHHAEL

SEQ ID No:96 (Protocadherin beta 8)

MEASGKLICRQRQVLFSFLLLGLSLAGAAEPRSYSVVEETEGSSFVTNLAKDLGLE
30 QREFSRRGVRVVS RGNKLHLQLNQETADLLLNEKLDREDLCGHTEPCVLR FQVLL
ESPFEFFQAE LQVIDINDHSPVFLDKQMLVKVSESSPPGTAFPLKNAEDLDIGQNNI
ENYIISPNSYFRVLTRKRS DGRKYPELVLDNALDREEEAELRLTLTALDGGSPPRSG

TAQVYIEVVDVNDNAPEFQQPFYRVQISEDSPISFLVVKVSATDVD TG VNGEISYSL
FQASDEISKTFKVDFLTGEIRLKKQLDFEKFQSYEVNIEARDAGGFSGKCTVLIQVI
DVNDHAPEVTMSAFTSPIPENAPETVVALFSVSDLDSENGKISCSIQEDLPFLLKSS
VGNFYTLTETPLDRESRAEYNVTITVTDLGTPRLTTHLNMTVLVSDVNDNAPAFT
5 QTSYTLFVRENNSPALHIGSVSATDRDSGTNAQVTYSLLPPQDPHLPLASLVSINTD
NGHLFALRSLDYEALQAFEFRVGASDRGSPALSSEALVRVLVLDANDNSPFVLYPL
QNGSAPCTELVPRAAEPGYLVTKVVAVDGDSGQNAWLSYQLLKATEPGLFGVW
AHNGEVRTARLLSERDAAKQRLVVLVKDNGEPPCSATATLHLLLVDGFSQPYPYPL
PEAAPAQGQADSLTVYLVVALASVSSLFLFSVLLFVAVLLCRRSRAASVGRCSVPE
10 GPFPGLHLDVRGTGSLSQNYQYEVCLAGGSGTNEFQFLKPVLPNIQGHSGFPEME
QNSNFRNGFGFSLQLK

SEQ ID No:97 (REP8 protein)

MASRGVVGIFFLSAVPLVCLELRRGIPDIGIKDFLLCGRILLALLTLISVTTSWL
15 NSFKSPQVYLKEEEEKNEKRQKLVRKKQQEAQGEKASRYIENVLKPHQEMKLRK
LEERFYQMTGEAWKLSSGHKLGGDEGTSQTSFETSNREAAKSQNLPKPLTEFPSPA
EQPTCKEIPDLPEEPSQTAEVVTVALRCPSGNVLRRLFLKSYSSQVLFDWMTRIG
YHISLYSLSTSFPRLPLAVEGGQSLEDIGITVDTVLILEEKEQTN

20 SEQ ID No:98 (RING finger protein 5)

MAAAEEEDGGPEGPNRERGGAGATFECNICLETAREAVVSVCGHLYCWPC LHQW
LETRPERQECPVCKAGISREKVPLYGRGSQKPQDPRLKTPPRPQGQRPAPESRGG
FQPF GDTGGFHFSFGVGAFPGFFTTVFNAHEPFRRGTGVDLGQGHFPASSWQDSL
FLAIAFFFFWLLSI

25

SEQ ID No:99 (Retinal short-chain dehydrogenase/reductase retSDR2)

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKL
KSKLVLDINKHGLEETAACKGLGAKVHTFVVDSCNREDIYSSAKKVKA EIGD
VSILVNNAGVVYTSDLFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIV
30 TVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNT
GFIKNPSTSLGPTLEPEEVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLK
RKISVKFDAVIGYKMK AQ

SEQ ID No:100 (Stromal cell-derived factor 2-like 1)

MWSAGRGGAAWPVLLGLLLALLVPGGGAAKTGAELVTCGSVLKLLNTHHRVRL
HSHDIKYGSGSGQQSVTGVEASDDANSYWRIRGGSEGGCPCGSPVRCGQAVRLTH
5 VLTGKNLHTHHFPSPLSNNQEVSFAFGEDGEGEDDLDLWTVRCSGQHWEREA A VRL
QHVGTSVFLSVTGEQYGSPIRGQHEVHGMPSANTHNTWKAMEGIFIKPSVEPSAG
HDEL

SEQ ID No:101 (Thioredoxin domain-containing protein)

10 GRWASGEMAPSGSLAVPLAVLVLLLWGAPWTHGRRSNVRVITDENWRELLEGD
WMIEFYAPWCPACQNLQPEWESFAEWGEDLEVNIKVDVTEQPGLSGRFITALPT
IYHCKDGEFRRYQGPRTKKDFINFISDKWKSI EPVSSWFGPGSVLMSSMSALFQLS
MWIRTCHNYFIEDLGLPVWGSYTVFALATLFSGLLLGLCMIFVADCLCPSKRRRPQ
PYPYPSKKLLSESAQPLKKVEEEQEADEEDVSEEEAESKEGTNKDFPQNAIRQ RSL
15 GPLATDKS

SEQ ID No:102 (Voltage-dependent anion channel 1)

AVPPTYADLGKSARDVFTKGYGFGLIKLDLKT KSENGLEFTSSGSANTETTKVTGS
LETKYRWTEYGLTFTEKWNTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNA
20 KIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWLAGYQMN FETA KSRVTQS
NFAVGYKTDEFQLHTNVNDGTEFGGSIYQKV NKKLETA VNLA WTAGNSNTRFGI
AAKYQIDPDACFSAKVNNSSLIGLGYTQTLKPGIKL T SALLDGKNVNAGGHKLG
LGLEFQA

25 SEQID No:103 (ATP-binding cassette, sub-family A member 3)

MAVLRQLALLLWKNYTLQKRKVLVTVLELFLPLLFP GILIWRLRKIQSENV PNATI
YPGQSIQELPLFFTFPPPGDTWELAYIPSHSDAAKTVTETVRRALVINMRVRGFPSE
KDFEDYIRYDNCSSSVLAAVVFEHPFNHSKEPLPLAVKYHLRFSYTRRNYMWTQT
GSFFLKETEGWHTTSLFPLFPNPGPRELTSPDGGEPGYIREGFLAVQHA VDRAIME
30 YHADAATRQLFQRLTVTIKRFPYPPIADPFLVAIQYQLPLLLLSFTYTALT IARAV
VQEKERRLKEYMRMMGLSSWLHWSAWFLLFFLFL LIAASFMTLLFCVKVKPNVA
VLSRSDPSLVLAFLLCFAISTISFSFMVSTFFSKANMAAAF GGFLYFFTYIPYFFVAP

RYNWM TLSQKLCSCLLSNVAMAMGAQLIGKFEAKGMGIQWRDLLSPVNVDDDF
CFGQVLGM LLLDSVLYGLVTWYMEAVFPGQFGVPQPWYFFIMPSYWCGKPRAV
AGKEEEDSDPEKALRNEYFEAEPEDLVAGIKIKHLSKVFRVGNKDRAAVRDLNLN
LYEGQITVLLGHNGAGKTTTSLMLTGLFPPTSGRAYISGYEISQDMVQIRKSLGLCP
5 QHDILFDNLTVAEHL YFYAQLKGLSRQKCPEEVKQMLHIIGLEDKWNRSRSLSG
GMRRKLSIGIALIAGSKVLILDEPTSGMDAISRRAIWDLLQRQKSDRTIVLTTHFMD
EADLLGDRIAIMAKGELQCCGSSFLKQKYGAGYHMTLVKEPHCNPEDISQLVHH
HVPNATLESSAGAELS FILPRESTHRFEGLFAKLEKKQKELG IASFGASITTMEEVFL
RVGKLVDSMDIQAIQLPALQYQHERRASDWA VDSNL CGAMDPSDGIGALIEEER
10 TAVKLNTGLALHCQQFWAMFLKKAAYSWREWKMVAAQVLVPLTCVTLALLAIN
YSELFD DPMLRLTLGEYGR TVVPFSVPGTSQLGQQLSEHLKDALQAEGQEPREV
LGDLEEF LIFRASVEGGGFNERCLVAASFRDVGERTVVNALFNNQAYHSPATALA
VVDNLLFKLLCGPHASIVVS NFPQPRSA LQA AKDQFNEGRKGFDIALNLLFAMAFL
ASTFSILAVSERAVQAKHVQFVSGVHVASFWSALLWDLISFLPSLLLLVVFKA FD
15 VRAFTRDGHMADTLLLLLLYGWAIPLMYLMNFFFLGAATAYTRLTIFNILSGIATF
LMVTIMRIPAVKLEELSKTLDHVFLVLPNHCLGMAVSSFYENYETRRYCTSSEVA
AHYCKKYNIQYQENFYAWSAPGVGRFVASMAASGCAYLILLFLIETNLLQRLRGIL
CALRRRRTLT ELYTRMPVLPEDQDVADERTRILAPSPDSLHTPLIKELSKVYEQR
VPLLA VDRLSLAVQKGECFGLLG FNGAGKTTTFKMLTGEESLTSGDAFVGGHRISS
20 DVGKVRQRIGYCPQFDALLDHMTGREMLVMYARLRGIPERHIGACVENTLRGLLL
EPHANKLVRTYSGGNKRKLSTGIALIGEPAVIFLDEPSTGMDPVARRLLWDTVARA
RESGKA IITSHSMEECEALCTRLAIMVQGQFKCLGSPQHLKSKFGSGYSLRAKVQS
EGQQEAL EEFKAFVDLTFPGSVLEDEHQGMVHYHLPGRDLSWAKVFGILEKAKE
KYGVD DYSVSQISLEQVFLSFAHLQPPTAEGR

25 SEQID No:104 (CAMK4)

MLKVTVPSCSASSCSSVTASAAPGTASLVPDYWIDGSNRDALSDFFEVESELGRGA
TSIVYRCKQKGTQKPYALKVLKKTVDKKIVRTEIGVLLRLSHPNIIKLKEIFETPTEI
SLVLELVTGGELFDRIVEKGYYSERDAADAVKQILEAVAYLHENGIVHRDLKPEN
30 LLYATPAPDAPLKIADFGLSKIVEHQVLMKTVCGTPGYCAPEILRGCAYGPEVDM
WSVGIIITYILLCGFEPFYDERGDQFMFRRILNCEYYFISPPWWDEVSLNAKDLVRKLI
VLDPKKRLTTFQALQHPWVTGKAANFVHMDTAQKKLQEFNARRKLKAAVKAVV

ASSRLGSASSSHGSIQESHKASRDPSPIQDGNEDMKAIPEGEKIQGDGAQAQAAVKGA
QAEMLMKVQALEKVKGADINAEAEAPKMVPKAVEDGIKVADLELEEGLAEEKLKTV
EEAAAPREGQGSSAVGFVPPQQDVILPEY

5 SEQ ID No:105 (KIAA0363)

EPCALTPGPSHLALTFLPSKPGARPQPEGASWDAGPGGAPSAWADPGEGGSPML
LPEGLSSQALSTEAPLPATLEPRIVMGEETCQALLSPRAARTALRDQEGGHASPDPP
PELCSQGDLSVPSPPDPDSFFTPPSTPTKTTYALLPACGPHGDARDSEAELRDELL
DSPPASPSGSYTTADGDSWASSPSCSLSLAPAEGLDFPSGWGLSPQGSMDEREL
10 HPAGTPEPPSSSESSLADSSSSWGQEGHFFDLDFLANDPMPAALLPFQGSILFQVE
AVEVTPLSPEEEEEEA VADPDPGDLAGEGEEDSTSASFLQSLSDLSITEGMDEAFA
FRDDTSAASSSDSDSASYAEADDERLYSGEPHAQATLLQDSVQKTEESGGGAKGL
QAQDGTVSWAVEAAPQTSDRGAYLSQRQELISEVTEEGALGQESTATVTPHTLQ
VAPGLQVEVATRVTPQAGEEETDSTAGQESAAMAMPQPSQEGISEILGQESVTAE
15 KLPTPQEETSLTLCPDSPQNLKEEGGLDLPSGRKPVAAATVPRQAKEDLTLPQDSA
MTPPLPLQDSDLSSAPKPVAAATVVSQQAEEGLTLPQDSVMTPLPLQDTELSSAPK
PVAAATLVVSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATLVVSQQAEEG
LTLPLQDSAMTPPLPLQDSDLSSAPKPVAAATLVVSQQAEEGLTLPQDSAMTPPLPLQ
DSDLSSAPKPVAAATVVSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATI
20 VSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATPVVSQQAEEGLTLPQDSA
MTPPLPLQDSDLSSAPKPVAAATPVVSQQAEEGLTLPQDSAMTAPLPLQDTGPTSGP
EPLAVATPQTLQAEAGCAPGTEPVATMAQQEVGEALGPRPAPEEKNAALPTVPEP
AALDQVQQDDPQPAEAGTPWAAQEDADSTLGMEALSLEPASGAGEEIAEALSR
PGREACLEARAHTGDGAKPDSPQKETLEVENQQEGGLKLLAQEHGPRSA LGGAR
25 EVPDAPPAACPEVSQARLLSPAREERGLSGKSTPEPTLPSAVATEASLDSCPESSVG
AVSSLDRGCPDAPAPTSAPTSQQPEPVLGLGSVEQPHEVPSVLGTPLLQPPENLAK
GQPSTPVDRPLGPDPSAPGTLAGAALPPEPPAPCLCQDPQEDSVEDEEPPGSLGLP
PPQAGVQPA AAAVSGTTQPLGTGPRVSLSPHSPLLSPKVASMDAKDLALQILPPCQ
VPPPSGPQSPAGPQGLSAPEQQEDEDSEEDSPRALGSGQHSDSHGESSAELDEQDI
30 LAPQTVQCPAQAPAGGSEETIAKAKQSRSEKKARKAMSKLGLRQIQGVTRITIQKS
KNILFVIAKPDVFKSPASDTYVVFGEAKIEDLSQQVHKAAAEEKFKVPSEPSALVPES

APRPRVRLECKEEEEEEEEVEDEAGLELRDIELVMAQANVSRKAVRALRDNHSD
IVNAIMELTM

SEQID No:106 (DCTN1)

5 MMRQAPTARKTTTRPKPTRPASTGVAGASSSLGPSGSASAGELSSSEPSTPAQTP
LAAPIPTPVLTPGAVPPLSPSKKEEGLRAQVRDLEEKLETLRLKRAEDKAKLKE
LEKHKIQLEQVQEWKSKMQEQQADLQRRLEKEARKEAKEALEAKERYMEEMADT
ADAIEMATLDKEMAEERAESLQQEVEALKERVDELTTDLEILKAEIEKGSDDGAAS
SYQLKQLEEQNARLKDALVRMRDLSSEKQEHVKLQKLMEKKNQELEVVRQQRE
10 RLQEELSQAESTIDELKEQVDAALGAEEMVEMLTDRNLNLEEKVRELRETVGDLE
AMNEMNDELQENARETELELREQLDMAGARVREAQKRVEAAQETVADYQQTIK
KYRQLTAHLQDVNRELTNQQEASVERQQQPPETFDKFKFAETKAHAKAIEMEL
RQMEVAQANRHMSLLTAFMPDSFLRPGGDHDCVLVLLMPRLICKAELIRKQAAQ
EKFELSENCSERPGLRGAAGEQLSFAAGLVYSLSLQATLHRYEHALSQCSVDVY
15 KKVGSLYPEMSAHERSLDFLIELLHKDQLDETNNVEPLTKAIKYYQHLYSIHLAEQ
PEDCTMQLADHIKFTQSALDCMSVEVGRLRAFLQGGQEATDIALLLRDLETSCSDI
RQFCKKIRRRMPGTDAPGIPAALAFGPQVSDTLDCRKHLTWVVAVLQEVA AAA
AQLIAPLAENEGLLVALEELAFKASEQIYGTPSSSPYECLRQSCNLISTMKNLAT
AMQEGEYDAERPPSKPPPVELRAAALRAETDAEGLGLKLEDRETVIKELKKSLKI
20 KGEELSEANVRLSLEKKLDSAAKDADERIEKVQTRLEETQALLRKKEKEFEETM
DALQADIDQLEAEKAELKQRLNSQSKRTIEGLRGPPPSGIATLVSGIAGEEQQRGAI
PGQAPGSVPGPGLVKDSPLLLQQISAMRLHISQLQHENSILKGAQMKASLASLPPL
HVAKLSHEGPGSELPAGALYRKTSQLETLNQLSTHTHVVDITRTSPAASKPSAQL
MEQVAQLKSLSDTVEKLKDEVLKETVSQRPGATVPTDFATFPSSAFLRAKEEQD
25 DTVYMGKVTFSCAAGFGQRHRLVLTQEQLHQLHSRLIS

SEQ ID No:107 (KIAA1250)

LQLSVKMSVLISQSVINYVEENIPALKALLEKCKDVDERNECGQTPLMIAAEQGN
LEIVKELIKNGANCNLEDLDNWTALISASKEGHVHIVEELLKCGVNLEHRDMGGW
30 TALMWACYKGRDVTVELLLSHGANPSVTGLYSVYPIIWAAGRGHADIVHLLQN
GAKVNCSDKYGTTPLVWAARKGHLECVKHELLAMGADVQEGANSMTALIVAV
KGGYTQSVKEILKRNPVNLTDKDGNTALMIASKEGHTEIVQDLLDAGTYVNIPD

RSGDTVLI GAVRGGHVEIVRALLQKYADIDIRGQDNKTALYWAVEKGNATMVRD
ILQCNPDTEICTKDGETPLIKATKMRNIEVVELLDDKGAKVSAVDKKGDTPLHIAIR
GRSRKLAELLRLNPKDGRLLYRPNKAGETPYNIDCSHQKSILTQIFGARHLSPTETD
GDM LGYDLYSSALADILSEPTMQPPICVGLYAQWGS GKSFL LKKLEDEMKTFA GQ
5 QIEPLFQFSWLIVFLTLLLCGGLGLLFAFTVHPNLGIAVSL SFLALLYIFFIVITYFGGR
REGESWNWAWVLSTRLARHIGYLELL LKLMFVNPPELPEQTTKALPVRFLFTDYN
RLSSVGGETSLAEMIA TLSDACEREFGLATRLFRVFKTEDTQGGKKKWKKTCCPLS
FVIFLFIIGCIISGITLLAIFRVDPKHLTVNAVLSIASVVGLAFVLNCR TWWQVLD SL
LNSQRKRLHNAASKLHKLKSEGFMKVLKCEVELMARMAKTIDSFTQNQTRLV VII
10 DGLDACEQDKVLQMLD TVRVLFSGKPFIAIFASDPHIIKAINQNLNSVLRDSNING
HDYMRNIVHLPVFLNSRGLSNARKFLVTSATNGDVPCSDTTGIQEDADRRVSQNS
LGEMTKLGSKTALNRRDTYRRRQMQR TITRQMSFDLT KLLVTEDWFS DISPQ TMR
RLLNIVSVTGRLLRANQISFNWDR LASWINLTEQWPYRTSWLILYLEETEGIPDQM
TLKTTYERISKNIPTTKDVEPLLEIDGDIRNFEVFLSSRTPVLVARDVKVFLPCTVNL
15 DPKLREIADVRAAREQISIGGLAYPPLPLHEGPPRAPSGYSQPPSVCSSTS FN GPFA
GGVVSPQPHSSYYSGMTGPQH PFYNRPFFAPYLYTPRYYPGGSQH LISRPSVK TSL
PRDQNNGLEVIKEDAAEGLSSPTDSSRGSGPAPGPVLLNSLNVD AVCEKLKQIEG
LDQSM LPQYCTTIKKANINGRVLAQC NIDELKKEMNMNFGDWHLFRSTVLEM RN
AESHVVPEDPRFLSESSSGPAPHGEPARRASHNELPHTELSSQTPYTLNFSFEELNTL
20 GLDEGAPRHSNLSWQSQTRRTPSLSSLNSQDSSIEISKLT DKVQAEYRDAYREYIAQ
MSQLEGGPGSTTISGRSSPHSTYYMGQSSSGGSIHSNLEQEK GKDSEPKPDDGRKSF
LMKRGDVIDYSSSGVSTNDASPLDPITEEDEKSDQSGSKLLPGKKSSERSSSLFQTDL
KLKGSGLRYQKLPSDEDESGTEESDNTPLLKDDKDRKAEGKVERVPKSPEHSAEPI
RTFIKAKEYLSDALLDKKDSSDSGVRSSSESSPNHSLHNEVADDSQLEKANLIELED
25 DSHSGKRGIPHSLSGLQDPHARM SICS EDDKSPSECSLIASSPEENWPACQKAYNLN
RTPSTVTLN NNSAPANRANQNFD EMEGIRETSQVILRPSSSPNPTTIQ NENLKSMT H
KRSQRSSYTRL SKDPPELHAAASSESTGFGEERESIL

SEQID No:108 (FACL3)

30 MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSES RQEKS NR IKA KP
VNSKPDSAYRSVNSLDGLASVLYPGCDTLDKVFTYAKNKFKNKRL LGTREV LNEE
DEVQPNGKIFKKVILGQYNWLSYEDVFVRAFNFGNGLQMLGQKPKTNIAIFCETR

AEWMIAAQACFMYNFQLVTLYATLGGAIVHALNETEVTNIITSKELLQTKLKDIV
SLVPRLRHITVDGKPPTWSDFPKGIIVHTMAAVEALGAKASMENQPHSKPLPSDIA
VIMYTSGSTGLPKGVMISHSNIAGITGMAERIPELGEEDVYIGYLPLAHVLELSAEL
VCLSHGCRIGYSSPQTLADQSSKIKKGSKGDTSMKPTLMAAVPEIMDRIYKNVM
5 NKVSEMSSFQRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLLGGNIRLLLCG
GAPLSATTQRFMNICFCCPVGQGYGLTESAGAGTISEVWDYNTGRVGAPLVCCEI
KLKNWEEGGYFNTDKPHPRGEILIGGQSVTMGYKNEAKTKADFSEDENGQRWL
CTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLVDNICAYANS
YHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAISASL
10 EKFEIPVKIRLSPEPWTPETGLVTD AFKLKRKELKTHYQADIERMYGRK

SEQID No:109 (FACL4)

MKLKLNVLTIILLPVHLLITIYSALIFIPWYFLTNAKKKNAMAKRIKAKPTSDKPGSP
YRSVTHFDSLAVIDIPGADTLDKLFDHAVSKFGKKDSLGTREILSEENEMQPNGKV
15 FKKLILGNYKWMNYLEVNRNVNFGSGLTALGLPKNTIAIFCETRAEWMIAAQ
CFKYNFPLVTLYATLGKEAVVHGLNESEASYLITSVELLESKLKTALLDISCVKHII
YVDNKAINKAEYPEGFEIHSMQSVEELGSNPENLGIPPSRPTPSDMAIVMYTSGSTG
RPKGVMHHSNLIAGMTGQCERIPGLGPKDTYIGYLPLAHVLELTAEISCFTYGCR
IGYSSPLTSLDQSSKIKKGSKGDC TVLKPTLMAAVPEIMDRIYKNVMSKVQEMNYI
20 QKTLFKIGYDYKLEQIKKGYDAPLCNLLL FKKVKALLGGNVRMMLSGGAPLSPQT
HRFMNVCFCCPIGQGYGLTESCGAGTVTEVTDYTTGRVGAPLICCEIKLKD WQEG
GYTINDKPNPRGEIVIGGQNISMGYFKNEEKTAEDYSVDENGQRWFCTGDIGEFHP
DGCLQIIDRKKDLVKLQAGEYVSLGKVEAALKNCPLIDNICAFAKSDQSYVISFVV
PNQKRLTLLAQKGVGTWVDICNNPAMEAEILKEIREAANAMKLERFEIPIKVRL
25 SPEPWTPETGLVTD AFKLKRKELRNHYLKDIERMYGGK

SEQID No:110 (KIAA0095)

MDTEGFGELLQQAELAAETEGISELPHVERN LQEIQQAGERLRSRTLTRTSQETA
DVKASVLLGSRGLDISHISQRLESLSAATTFEPLPVKDTDIQGFLKNEKDNALLSAI
30 EESRKRTFGMAEEYHRESMLVEWEQVKQRILHTLLASGEDALDFTQESEPSYISDV
GPPGRSSLDNIEMAYARQIYTYNEKIVNGHLQPNLVDLCASVAELDDKSISDMWT
MVKQMTDVLLTPATDALKNRSSVEVRMEFVRQALAYLEQSYKNYTLVTVFGNL

HQAQLGGVPGTYQLVRSFLNIKLPAPLPGLQDGEVEGHPVWALIYYCMRCGDLLA
ASQVVNRAQHQLGEFKTWFEYMNSKDRRLSPATENKLRLHYRRALRNNTDPY
KRAVYCIIGRCDVTDNQSEVADKTEDYLWLKLNQVCFDDDDGTSSPQDRLTLSQFQ
KQLLEDYGESHTVNQQPFLYFQVLFLTAQFEAAVAFLFRMERLRCHAVHVALVL
5 FELKLLKSSGQSAQLLSHEPGDPPCLRRLNFVRLMLLYTRKFESTDPREALQYFY
FLRDEKDSQGENMFLRCVSELVIESREFDMILGKLENDGSRKPGVIDKFTSDTKPII
NKVASVAENKGLFEEAAKLYDLAKNADKVLELMNKLSPVVPQISAPQSNKERL
KNMALSIAERYRAQGISANKFVDSTFYLLLDLITFFDEYHSGHIDRAFDIERLKLVP
LNQESVEERVAEFRNFSDEIRHNLSEVLLATMNLFTQFKRLKGTSPSSSSRPQRVIE
10 DRDSQLRSQARTLITFAGMIPYRTSGDTNARLVQMEVLMN

SEQID No:111 (KIAA0922)

MLLVLECVLFSVAQGYFRMDSSATQFHIETHENTSGLWSIWYRNHFDRSVVLNDV
FLSKETKHMLKILNFTGPLFLPPGCWNIFSLKLA VKDIAINLFTNVFLTTNIGAIFAIP
15 LQIYSAPTKEGSLGFEVIAHCGMHYFMGKSKAGNPWNWNGSLSLDQSTWNVDSEL
ANKLYERWKYKNGDVCKRNVLGTTTFAHLKKSKESESFVFFLPRLIAEPGLMLN
FSATALRSRMKYFVVQNPSSWPVSLQLLPLSLYPKPEALVHLLHRWFGTDMQMI
NFTTGEFQLTEACPYLGTHSEESRFGILHLHLQPLEMKRVGVVFTPADYGKVTSLIL
IRNNLTVIDMIGVEGFGARELLKVGGRLPGAGGSLRFKVPSTLMDCRRQLKDSK
20 QILSITKNFKVENIGPLPITVSSLKINGYNCQGYGFEVLDCHQFSLDPNTSRDISIVFT
PDFTSSWWIRDLSLVTAADLEFRFTLNVTLPHHLLPLCADVVPGPSWEESFWRLTV
FFVSLSLLGVILIAFQQAQYILMEFMKTRQRQNASSSSQQNNGPMDVISPHSYKSN
CKNFLDTYGPSDKGRGKNCLPVNTPQSRIQNAAKRSPATYGHSSQKKHKCSVYYS
KHKTSTAAASSTSTTTEEKQTSPLGSSLPAAKEDICTDAMRENWISLRYASGINVNL
25 QKNLTLPKNLLNKEENTLKNTIVFSNPSSECSMKEGIQTCMFPKETDIKTSENTAEP
KERELCPLKTSKKLPENHLPRNSPQYHQPDLPESRKNNNGNNQQVPVKNEVDHCE
NLKKVDTKPSSEKKIHKTSREDMFSEKQDIPFVEQEDPYRKKKLQEKREGLNLQNL
NWSKSRTCRKNKKRGVAPVSRPPEQSDKLVCSDFERSELSSDINVRSWCIQESTR
EVCKADAEIASSLPAAQREAEGYYQKPEKKCVDFKFCSDSSSDCGSSSGSVRASRG
30 WGSWSSTSSSDGDKKPMVDAQHFLPAGDSVSQNDPSEAPISLNLSHNICNPMTV
NSLPQYAEPSCLPAGPTGVEEDKGLYSPGDLWPTPPVCVTSSLNCTLENGVPCVI
QESAPVHNSFIDWSATCEGQFSSAYCPLELNDYNAPFEENMNYANGFPCPADVQT

DFIDHNSQSTWNTPPNMPAAWGHASFSSPPYLTSTRSLSPMSGFLFGSIWAPQSDV
YENCCPINPTTEHSTHMENQAVVCKEYYPGFNPFRA YMNLDIWTTTANRNANFPL
SRDSSYCGNV

5 SEQ ID No:112 (PAS domain containing serine/threonine kinase)

MEDGGLTAFEEDQRCLSQSLPLPVSAEGPAAQTAEPSRSFSSAHRHLSRRNGLSR
LCQSR TALS ED RWSSYCLSSLA AQNICTSKLHCPAAPEHTDPSEPRGSVSCCSLLRG
LSSGWSSPLL PAPVCNPNKAI FTVD AKTTEILVANDKACGLLGYSSQDLIGQKLTQ
FFLRSDSDVVEALSEEHMEADGHAAVVF GTVVDIISRSGEKIPVS VWMKRMQRER
10 RLCCVVVLEPVERVSTWVAFQSDGTVTSCDSLFAHLHG YVSGEDVAGQHITDLIPS
VQLPPSGQHIPKNLKIQRSVGRARDGTTFPLSLKLKSQPSSEEATTGEAAPVSGYRA
SVWVFCTISGLITLLPDGTHGINHSFALT LFGYGKTELLGKNITFLIPGFYSYMDLA
YNSSLQLPDLASCLDVGNESGCGERTLDPWQGDPAEGGQDPRINVVL AGGHVV
PRDEIRKLMESQDIFTGTQTELIAGGQLLSCLSPQPAPGV DNVPEGSLPVHGEQALP
15 KDQQITALGREEPVAIESPGQDLLGESRSEPVDVKPFASCEDSEAPVPAEDGGSDA
GMCGLCQKAQLERMGVSGPSGSDLWAGAAVAKPQAKGQLAGGSLLMHCPCYGS
EWGLWWR SQDLAPSPSGMAGLSFGTPTLDEPWLG VENDOR EELQTCLIKEQLS QLS
LAGALDVPHAELVPTECQAVTAPVSSCDLGGRDLCGGCTGSSSACYALATDLP GG
LEAVEAQEVDVNSFSWNLKELFFSDQTDQTSSNCSCATSELRETPSSLA VGSDPDV
20 GSLQE QGSCVLD DRELLLLTGTCVDLGQGRRFRESCVGHDPTEPLEVCLVSSEHY
AASDRESPGHVPSTLDAGPEDTCPSAEPR LNVQVTSTPVIVMRGAAGLQREIQEG
AYSGSCHHRDGLRLSIQFEVRRVELQGPTPLFCCWL VKDLLHSQRDSAARTRFLA
SLPGSTHSTAAELTGPSLVEVLRARPWFEPPKA VELEGLAACEGEYSQKYSTMSP
LGSGAFGFVWTA VDKEKNKEVVVKFIKKEKVLEDCWIEDPKLGKVTLEIAILSRV
25 EHANI KVL DIFENQGFFQLVMEKHGSGLDLFAFIDRHPR LDEPLASYIFRQLVSAV
GYLRLKDIIHRDIKDENVIAEDFTIKLIDFGSAA YLERGKLFYTFCGTIEYCAPEVL
MGNPYRGPELEMWSLGVTLYTLVFEENPFCELEETVEAAIHPPYLVSKELM SLVSG
LLQPVPERRTTLEKLVTDPWVTQPVNLADYTWE EVC RVNKPESGVL SAASLEMG
NRSLSDVAQAQELCGGPVPGEAPNGQGCLHPGDPRL LTS

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SEQID No:114 (homolog of yeast golgi membrane protein yif1p (yip1p-interacting factor)
HPAGLAAAAAGTPRLPSKRRI PVSQPGMADPHQLFDDTSSA QSRGYGAQRAPGGL

SYPAASPTPHAAFLADPVSNMAMAYGSSSLAAQGKELVDKNIDRFIPITKLKYYFA
VDTMYVGRKLGLLFFPYLHQDWEVQYQQDTPVAPRFDVNAPDLYIPAMAFITYV
LVAGLALGTQDRFSPDLLGLQASSALAWLTLEVLAILLSLYLVTVNTDLTTIDLVA
FLGYKYVGMIGGVLMGLLFGKIGYYLVLGWCCVAIFVFMIRTLRLKILADAAAEG
5 VPVRGARNQLRMYLTMAVAAAQPMLMYWLT FHLVR

SEQ ID No:114 (Integral membrane transporter protein)

MVNYAWAGRSQRKLWWRSVAVLTCKSVVRPGYRGGLQARRSTLLKTCARARA
TAPGAMKMVAPWTRFYSNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADP
10 DQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGAYKQRAAWIIPFFC
YQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIIL
TFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPP
PYVSA

15 SEQID No:115 (GPR49)

MDTSRLGVLLSLPVLLQLATGGSSPRSGVLLRGCPHCHCEPDGRMLLRVDCSDL
GLSELPSNLSVFTSYLDLSMNNISQLLPNPLPSLRFLEELRLAGNALTYIPKGFTGL
YSLKVLMLQNNQLRHVPTEALQNLRLSLQSLRLDANHISYVPPSCFSGLHSLRHLW
LDDNALTEIPVQAFRSLALQAMTLALNKIHHIPDYAFGNLSSLVVLHLHNNRIHSL
20 GKCCFDGLHSLETLDLNYNNLDEFPTAIRTLNLKELGFHSNNIRSIPEKAFVGNPS
LITIHFYDNPIQFVGRSAFQHLPELRTLTLNGASQITEFPDLTG TANLES LTLTGAQIS
SLPQTVCNQLPNLQVLDLSYNLLEDLP SFSVCQKLQKIDLRHNEIYEIKVDTFQQLL
SLRSLNLAWNKIAIHPNAFSTLPSLIKLDLSSNLLSSFPITGLHGLTHLKL TGNHAL
QSLISSENFPELKVIEMPYAYQCCAFGVCENAYKISNQWNKGDNSSMDDLHKKDA
25 GMFQAQDERDLEDFLD FEEDLKALHSVQCSPSPGPFKPCEHLLDGWLIRIGVWTI
AVLALTCNALVTSTVFRSPLYISPIKLLIGVIAAVNMLTGVSSAVLAGVDAFTFGSF
ARHGAWWENGVGCHVIGFLSIFASESSVFLTLAALERGFSVKYSAKFETKAPFSS
LKVIII LCALLALTMAAVPLLGGSKYGASPLCLPLPFGEPTMGYMAVALLNSLCF
LMMTIA YTKLYCNLDKGDLENTWDCSMVKHIALLLFTNCILNCPVAFLSFSSLINLT
30 FISPEVIKFILLVVVPLPA CLNPLL YILFNPHFKEDLVSLRKQTYVWTRSKHPSLMSI
NSDDVEKQSCDSTQALVTFTSSSITYDLPPSSVPSPAYPVTESCHLSSVAFVPCL

SEQ ID No:116 (NAP-1 related protein/NAP-1-like protein)

KEQSELDQDLDDVEEVVEEETGEETKLKARQLTVQMMQNPQILAALQERLDGLV
ETPTGYIESLPRVVKRRVNALKNLQVKCAQIEAKFYEEVHDLERKYAVLYQPLFD
KRFEIINAIYEPTEEEECEWKPDEEDEISEELKEKAKIEDEKKDEEKEDPKGIPFWLT
5 VFKNVDLLSDMVQEHDEPILKHLKDIKVKFSDAGQPMSFVLEFHFEPNEYFTNEVL
TKTYRMRSEPDDSDPFSFDGPEIMGCTGCQIDWKKGKNVTLKTIKKKQKHKGRT
VRTVTKTVSNDSFFNFFAPPEVIPKFSAFDDDAEAILAADFEIGHFLRERIIPRSVLYF
TGEAIEDDDDDYDEEGEEADEGYQLFEEVKSCSKLFQRWLQ

10 SEQID No:117 (SPTLC2)

MRPEPGGCCCRRTVRANGCVANGEVRNGYVRSSAAAAAAAAAAGQIIHVTQNGG
LYKRPFNEAFEETPMLVAVLTYVGYGVLTFLGYLRDFLRYWRIEKCHHATEREEQ
KDFVSLYQDFENFYTRNLYMRIRDNWNRPICSVPGARVDIMERQSHDYNWSFKY
TGNIIGVINMGSYNYLGFARNTGSCQEAAAKVLEEYGAGVCSTRQEIGNLDKHE
15 ELEELVARFLGVEAAMAYGMGFATNSMNIPALVGKGCLILSDELNHASLVLGARL
SGATIRIFKHNNMQSLEKLLKDAIVYGQPRTRRPWKKILILVEGIYSMEGSIVRLPE
VIALKKKYKAYLYLDEAHSIGALGPTGRGVVEYFGLDPEDVDVMMGTFTKSFGA
SGGYIGGKKELIDYLRTHSHSAVYATSLSPVVEQIITSMKCIMGQDGTSLGKECV
QQLAENTRYFRRRLKEMGFIIYGNEDSPVVPLMLYMPAKIGAFGREMLKRNIGVV
20 VVGFPATPIIESRARFCLSAHTKEILD TALKEIDEVGDLLQLKYSRHRLVPLLD RPF
DETTYEETED

SEQID No:118 (Delta-like homolog)

MTATEALLRVLLLLLAFGHSTYGAECFPACNPQNGFCEDDNVCRCQPGWQGPLC
25 DQCVTSPGCLHGLCGEPGQCICTDGWDGELCDRDVRACSSAPCANNGTCVSLDG
GLYECSCAPGYSGKDCQKKDGPCVINGSPCQHGGTCVDDEGRASHASCLCPPGFS
GNFCEIVANSCTPNPCENDGVCTDIGGDFRCRCPAGFIDKTCSRPTVNCASSPCQN
GGTCLQHTQVSYECLCKPEFTGLTCVKKRALSPQQVTRLPSGYGLAYRLTPGVHE
LPVQQPEHRILKVSMKELNKKTPLLTEGQAICFTILGVLTSLVVLGTVGIVFLNKCE
30 TWVSNLRYNHMLRKKKNLLQYNSGEDLAVNIIFPEKIDMTTFSKEAGDEEI

SEQ ID No: 119 (25 kDa microsomal signal peptidase subunit)

MAAAAVQGGRSGGSGGCSGAGGASNCGTGSGRSGLLDKWKIDDKPKIDKWDG
SAVKNSLDDSAKKVLEKYKYVENFGLIDGRLTICTISCFFAIVALIWDYMHPFPES
KPVLAALCVISYFVMMGILTIYTSYKEKSIFLVAHRKDPTGMDPDDIWQLSSSLKRF
DDKYTLKLTFISGR TKQQREAEFTKSI AKFFDHSGTLVMDA YEPEISRLHDSLAIER
5 KIK

SEQ ID No: 120 (APP-C99)

MDAEFRHDSGYEVHHQKL VFFAEDVGSNKGAIIGLMVGGVVIATVIVITLVMLKK
KQYTSIHG VVEVDA AVTPEERHLSKMQQNGYENPTYKFFE QMQN

10

SEQ ID No: 121 (Psen-2)

MLTFMASDSEEEVCDERTSLMSAESPTPRSCQEGRQGPEDGENTA QWRSQENEED
GEEDPDRYVCSGV PGRPPGLEEELTKYGA KHVIMLFVPVTL CMIVV VATIKSVRF
YTEKNGQLIYTPFTEDTPSVGQRL LNSVLNTLIMISVIVVM TIFLVVLYKYRCYKFI
15 HGWLIMSSLMLLFLFTYIYLGEVLKTYNVAMDYPTLLLT VWNFGAVGMVCIHWK
GPLVLQQA YLIMISALMALVF IKYLPESAWVILGAISVYDLVAVLCPKGPLRML
VETAQERNEPIFPALIYSSAMVWTVGMAKLD PSSQ GALQLPYDPEMEEDSYDSFG
EPSYPEVFEPPLTGYPGEELEEEERGVKLGLGDFIFYSVLVGKAAATGSGDWNTT
LACFVAILIGLCLTLLLLAVFKKALPALPISITFGLIFYFSTDNLVRPFMDTLASHQL
20 YI

SEQ ID No: 122 (FADS1)

MGTRAARPAG LPCGAENPAR RRLALGARQQ IHSWSPRTPS TRLTAPAGPA
RGVARPAMAP DPVAAETAAQ GTPRYFTWD EVAQRSGCEE RWLVIDRKVY
25 NISEFTRRHP GGSRVISHYA GQDATDPFVA FHINKGLVKK YMNSLLIGEL
SPEQPSLEPT KNKELTDEFR ELRATVERMG LMKANHVF FL LYLLHILLE
GAAWTLWVF GTSFLPFLC AVLLSAVQAA AGWLQHDFGH LSVFSTSKWN
HLLHHFVIGH LKGAPASWWS HMHFQHHAKP NCFRKDPDIN MHPFFFALGK
ILSVELGKQK KKYMPYNHQH KYFFLIGPPA LLPLYFQWYI FYFVIQRKKW
30 VDLAWMITFY VRFFLT YVPL LGLKAFLGLF FIVRFLESNW FVWVTQMNHI
PMHIDHDRNM DWVSTQLQAT CNVHKSAFND WFSGHLNFQI EHHLFPTMPR
HNYHKVAPLV QSLCAKHGIE YQSKPLLSAF ADIHS LKES GQLWL DAYLH Q

SEQ ID No: 123 (DEGS)

MGSRVSREDF EWVYTDQPHA DRRREILAKY PEIKSLMKPD PNLIWIIIMM
VLTQLGAFYI VKDLDWKWVI FGAYAFGSCI NHSMTLAIHE IAHNAAFGNC
5 KAMWNRWFGM FANLPIGIPY SISFKRYHMD HHRYLGDGVDVDIPTDFEG
WFFCTAFRKF IWVILQPLFY AFRPLFINPK PITYLEVINT VAQVTFDILI
YYFLGIKSLV YMLAASLLGL GLHPISGHFI AEHYMFLKGH ETYSYYGPLN
LLTFNVGYHN EHHDFPNIPG KSLPLVRKIA AEYYDNLPHY NSWIKVLYDF
VMDDTISPYS RMKRHQKGEM VLE

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SEQ ID No: 124 (SCD4/ HYPOTHETICAL PROTEIN FLJ21032)

MPGPATDAGK IPFCDAKEEI RAGLESSEGG GGPERRPGARG QRQNIVWRNV
VLMSLLHLGA VYSLVLIPKA KPLTLLWAYF CLLLAALGVT AGAHLRWSHR
SYRAKLPLRI FLAVANSMAF QNDIFERSRD HRAHHKYSET DADPHNARRG
15 FFFSHIGWLF VRKHRDVIEK GRKLDVTDLL ADPVVRIQRN TQHIQKEGRA
LNQEAACEML REWHQGHILK VTLPLGLHILA LLHTHCNHSE KCCLMLRALS
VSLEVF

SEQ ID No: 125 (FADS3)

20 MGGVGEPPGPR EGPAQPGAPL PTFCWEQIRA HDQPGDKWLVIERRVYDISR
WAQRHPGGSRLIGHHGAEDA TDAFRAFHQD LNFVRKFLQP LLIGELAPEE
PSQDGPLNAQLVEDFRALHQ AAEDMKLFDA SPTFFAFLLG HILAMEVLAW
LLIYLLGPGW VPSALAAFIL AISQAQSWCL QHDLGHASIF KKSWWNHVAQ
KFVMGQLKGF SAHWWNFRHF QHHAKPNIFH KDPDVTVAPV FLLGESSVEY
25 GKKKRRYLPY NQQHLYFFLI GPPLTLVNF EVENLAYMLV CMQWADLLWA
ASFYARFFLS YLPFYGVPGV LLFFVAVRVL ESHWFVWITQ MNHIPKEIGH
EKHRDWVSSQ LAATCNVEPS LFTNWFSGHL NFQIEHHLFP RMPRHNYSRV
APLVKSLCAK HGLSYEVKPF LTALVDIVRS LKKSGDIWLD AYLHQ

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